

ECONOMICS OF HANDICRAFTS INDUSTRY

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FOREWORD

•I have gone through the book ‘‘Economics of Handicrafts Industry’’ by Shri M.N. Upadhyay. It is a compilation of a fairly comprehensive factual account of the many aspects of our Handicrafts Industry which in the view of myself and many others is the only way by which we can increase employment opportunities in our country. The publication is timely just when a transition in our attitudes to handicrafts industry is taking place when we expect them to be economically viable so that they could be self-supporting. The empirical knowledge he has gained by working in this field has served him in good stead in shedding light on the various factors that impede the progress of the Indian Handicrafts Industry. It is a welcome addition to the available literature in the field.

(V.V. Giri)

PREFACE

To a considerable section of planners and administrators Handicrafts have yet to prove their bona fides as active components of planned economic development. They share this plight of 'to be or not to be' with the rest of the indigenous economic sector known as Village and Cottage Industries.

This work sets forth the economic claims of the Handicrafts sector and is based on my thesis entitled "Handicrafts of Andhra Pradesh—A study in growth" which has been awarded the Doctor of Philosophy degree in Economics. It also includes some of the data compiled for and used in my book entitled "Handicrafts of India" published earlier. This has been necessary to provide an adequate background and a wider perspective, so essential, for the appreciation of this fascinating, if complex, subject.

The Economic Analysis of the Handicrafts Industry is based on case studies of five Handicrafts of Andhra Pradesh. The case study methodology has been employed here, as elsewhere, to underline the qualitative characteristic in an attempt to give a feel and perspective to quantitative significance. The case studies are preceded by an Introductory chapter which provides a historical back-drop to the subject and traces its development since the Vedic times; this is followed by a discussion on Technology, Designs and Quality Control and Marketing and Export Promotion, which throw light on the current operational problems involved in these fields on a national scale.

The thesis has also drawn upon original and unpublished material collected during extensive field studies, interviews with craftsmen, Government officials, members of the All India Handicrafts Board and executives of Handicrafts Production and Marketing institutions in various parts of India. The findings of seminars, conferences, evaluation groups and study teams have

influenced the formulation of an approach to the subject and an appreciation of some of its intricate problems.

While Economic concepts like Sectoral Analysis, Dualism, Savings Effect and the Cobb-Douglas production function have been made use of in analysing the growth of Handicrafts, it would be a sad mistake to divorce the subject from its sociological and cultural moorings which invest it with a deeper meaning and significance. The report on Small Industries in India by the International Planning Team of the Ford Foundation (1954) summed up the point eloquently when it said, "Handicrafts have far greater importance than is indicated by the volume and value of their production as they embody cultural and artistic traditions of the country". It is earnestly hoped that this study will contribute, in some measure, to the small sector in general and the indigenous handicrafts sector in particular being assigned their rightful place in the development plans of India and other "developing countries", particularly because of their export potential, wide use of indigenous raw materials and techniques, limited investment in capital and a capacity to provide gainful employment to the entire family during its leisure at home. The Introductory chapter discusses the structure of craftsmen's guilds and how they enabled the country to earn friends in far-off lands and also inspired the craftsmen to strive towards perfection. Thus the development of handicrafts has an economic and cultural significance, both of which are woven inseparably together.

I have great pleasure in recording my profound gratitude to my Research Guide Dr. (Mrs) M. F. Jussawalla, Professor of Applied Economics, Osmania University, Hyderabad, who kindled my interest in Economics, while I was an undergraduate, and stimulated it into a lasting discipline. I am thankful to Prof. Harberger, Professor of Econometrics, Chicago University and Dr. Roy Burman, Officer on Special Duty, Handicrafts and Social Studies, Office of the Registrar General of India for their advice in preparing the Research Design. I am indebted to my friend Sri K.S.S. Raju, of the National Institute of Community Development, Hyderabad, for his keen interest in this project spread over several years.

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Industries Department and particularly to Shri V.K. Rao, I.C.S., and Sri T.L. Sankar, I.A.S., for the permission granted to undertake the Research work while I was working with the Government of Andhra Pradesh Industries Department.

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CHAPTER I

Introduction

The story of Indian Handicrafts goes back into the mists of antiquity when the story of Man himself began to be articulated, when the capacity of the hands to create was respected, even revered. Indian handicrafts thrived through the ages stimulated by a vigorous folk tradition, a benign culture, and in an age when individualism was cherished, and precision valued.¹

The Indian craft tradition is intermingled with her religion, philosophy and way of life. Thus details of crafts, including manufacturing techniques, form parts of Hindu religious texts.

As early as 1500 B.C. a vast body of Indian literature mentions the prodigious production of arts and crafts, many of which were of metal. The 'Rig Veda', the 'Sama Veda' and 'Yajur Veda' and the 'Atharva Veda' also the 'Brahmanas', and the 'Aranyakas', which included the 'Upanishads', and the 'Sutras', probably constitute the most complete study ever compiled on one single culture over so many consecutive centuries. Here is unfolded a verbal panorama of the 'Vedic' Indo-Aryan's incantations, philosophy, social customs, laws and religion; here the technological problems which the copper and bronze ages had presented Vedic man as a result of the revolutionary inventions for smelting and alloying copper to produce and cast bronze into survival implements, utensils and images of his anthropomorphically conceived Gods, were recorded. This literature is the Indologists' and Anthropologists' handbook 'par excellence' for dis-

1. *Indian Handicrafts*—Kamaladevi Chatteropadhyay, Indian Council for Cultural Relations, p. 1.

covering the effect these Bronze age inventions had on the material and non-material culture, i.e., the folk ways, customs, techniques and artifacts, of the proto-historical people. It is of no less interest to the contemporary layman, for in our own time" "the automobile as a new invention is no more than an adaptation of a powerfully compact power plant added to the age old (bullock) cart."

Handicraftsmen in ancient India were organised on the guild system and functioned as Associations known as "Srenis" or "Pugas". While interpreting a technical term for functionaries of a "Sreni" the renowned Commentator, Shankaracharya, observes: "The merchants and craftsmen always function in groups; they can create wealth only when they are grouped, not individually."

The Ramayana² specifically names eighteen traditional Srenis or Craft Associations, viz:—

- | | |
|------------------------------|------------------------|
| 1. Jewellers | 10. Armourers |
| 2. Potters | 11. Leather Workers |
| 3. Ivory Carvers | 12. Blacksmiths |
| 4. Perfumers | 13. Coppersmiths |
| 5. Goldsmiths | 14. Carpenters |
| 6. Weavers | 15. Makers of Figures |
| 7. Brass Workers | 16. Cutters of Crystal |
| 8. Painters | 17. Glass Makers |
| 9. Musical Instrument Makers | 18. In-Layers |

2. *Cire Perdue Casting in India* by Ruth Reeves, Crafts Museum, New Delhi, p. 24.

3. 'Inventions and Human Society,' Leslie Spier: *An Essay in Man, Culture and Society* by Harry L. Shapiro, New York, 1956, p. 225.

4. Aitreya Brahmana, 3.30.3; 4.25.8.9; 7.18.8.
Satapatha Brahmana, 13.7.1.1;
Atharva Veda, 1.9.3; 10.6.31;
Chandogya Upanishad, 5.2.6;
Kausitaki Upanishad, 4.20; 2.6; 4.15.20.
5. Bhadaranyaka Upanishad, 1.4.12.
6. Ayodhya Kanda, 83.11-15.

The ancient Indian Craftsman, in order to emphasise the religious character of his vocation, traced descent of his caste from "Vishwakarma, Lord of the Arts, Master of a thousand Handicrafts, Carpenter of the Gods, and builder of their palace divine, Fashioner of every jewel, First of Craftsman, by whose art men live and whom as a great and deathless God, they continually worship."

With this holy background, it was sacrilegious for the Indian craftsman to compromise standards or to deviate from the straight and narrow path laid out for him. There was also the valuable spiritual incentive to good craftsmanship—the attainment of "Moksha" or salvation. Little wonder that India has produced such lasting monuments of high craftsmanship as Ajanta and Ellora, the temples of Konarak, Khajuraho and Halebid and myriads of Handicrafts which, even today, breathe the spirit that was India. The assimilation of influences from art traditions and movements of other countries while retaining its spiritual expressiveness is an outstanding feature of the Indian art-craft tradition. Thus, neither conquerors nor machines have been able to exterminate the artist and the craftsman.

Beginning as a joint creation of the Aryan and Dravidian genius, Indian Arts and Crafts were first impregnated by Greek and Central Asian influence. Afterwards during the Muslim rule of India, they happily blended with Islamic traditions of art, absorbing even the European features later on. Thus our artists and craftsmen have ever adapted new designs and modes for creation stamped with their own appealing individuality, fineness and delicacy, the subtle flavour of beauty and the heritage of an age long culture, creating not only for the needs of the body, but also for the mind and soul.⁷ While absorbing the finest from art influences coming into contact with India, handicrafts also evolved their own designs and colours which had an enduring charm.

7. *Mahabharatha*: Quoted by Shanti Swarup—*Arts and Crafts of India and Pakistan*, p. 74.

8. *Arts and Crafts of India and Pakistan*, Shanti Swarup—Tara-porewallas, Bombay, pp. 74-75.

Out of a million coloured strands of tradition filled with song and verse, legends, myths, native romances and episodes, from the substance of the everyday life of the community, and out of nature's own rich storehouse, was woven a rich, creative and forceful art."

In the self-contained village economics of India, the craftsman had a vital role. His operation was based on personal relations with other members of the community and his consideration was in terms of kind and status. His was a labour of love and a dedication to those who were a part of his total life. Thus craftsmanship was no mere economic compulsion—it was a sacred duty—"Dharma".

Mahatma Gandhi's concept of "Sarvodaya" meant a dynamic, egalitarian community wherein every one in the village had work and self-respect. The farmer was as important in the set up as the weaver or craftsman. "Sarvodaya" symbolised the co-operative principle, "Each for all and all for each." An element of social security was also provided, including guarantees of old age care, marriage and a square meal. Nobody could ask for more and the misfortune of one was the concern of all.

This splendid organisational edifice built over several thousand years was subjected to severe strains when the ancient Socio-Political Order was rudely disturbed by foreign invasions after the 12th century. The general conditions in the country after that were not conducive to the health of democratic institutions. The craftsmen as well as the merchants became frequent victims of arbitrary methods employed by despots and feudal chieftains whom traditional law and customs could no longer restrain. The Institutions which thus failed to protect also failed to command loyalty from their members. Nevertheless some of them managed to survive till the impact of European Industrialism destroyed them completely.

Writing in 1880, Sir George Birdwood observed: "Under British rule—which secures the freest exercise of individual

9. *Indian Handicrafts*—Kamaladevi Chatopadhyay, Indian Council for Cultural Relations, p. 3.

energy and initiative, the authority of the trade guilds in India has necessarily been relaxed, to the marked detriment of those handicrafts the perfection of which depends on hereditary processes and skill.... But the guilds, by the stubborn resistance, further stimulated by caste prejudice, while they opposed all innovations, still continue, in this forlorn way, to serve a beneficial end, in maintaining, for probably another generation, the traditional excellence of the sumptuary arts of India, against the fierce and merciless competition of the English manufacturers. The guilds are condemned by many for fixing the hours of labour and the amount of work to be done in them by strict laws, the slightest infringement of which is punished by severe fines, which are the chief source of their income. But the object of these rules is to give the weak and unfortunate the same chance in life as others more favoured by nature. These rules naturally follow from the theocratic conceptions which have governed the whole organisation of social life in India; and it is incontrovertible that the unrestricted development of the competitive impulse in European life, particularly in the pursuit of personal gain, is absolutely antagonistic to the growth of the sentiment of humanity, and of real religious convictions among men.”

Modern India has raised an entirely new edifice of voluntary institutions in large and medium size trade and industry, on foundations adopted from modern Europe. It is an impressive edifice built brick by brick as Indian enterprise has acquired self-confidence and grown conscious of its own identity. Today, there is hardly a town of some business importance which does not have some sort of a voluntary business organisation. Big cities like Calcutta and Bombay have such organisations in hundreds.”

There are two main forms of organisation, the Chamber of Commerce and the Association; the latter is variously known in vernacular as “Vyapar Mandal”, “Maha Mandal”, “Sangham”, “Samiti”, “Sabha” and “Mahajan”. Organisations are also

10. *Industrial Arts of India* by Sir George Birdwood, p. 139.

11. Indian Co-operative Union: Survey of Associations of Handicraft Artisans, Dealers and Exporters, All India Handicrafts Board, 1958, p. 13.

styled as Chambers of Commerce, Federations, Syndicates and Committees.

The movement of voluntary institutions has definitely spread over to Handicrafts Industry and trade. There was a spurt of organisational activity in practically every handicraft centre during the Second World War, mostly on account of controls on raw materials. The usual pattern, adopted by authority, for distribution of raw materials was to hand over specified and regular supplies to a recognised association of each trade and industry in every locality. Numerous handicraft associations grew up all over the country, particularly in centres producing and handling textile handicrafts.¹²

Though most of the institutions built up during the war have dwindled or disappeared, the consciousness of their role is still intact everywhere. But unfortunately this consciousness has not yet established any points of contact with the main stream of consciousness in trade and industry at large. Its isolation prevents it from drawing on the strength and experience of the larger movement. And its own resources, human and material, are too inadequate to justify even an appeal for lifting itself by its boot-strings. It is rarely that we find a handicraft association affiliated to a Chamber of Commerce. In reply to enquiries sent to practically every Chamber of Commerce in the country, seeking information about existing links, we drew almost a blank. In the course of personal discussions also, while Secretaries, etc., of some Chambers of Commerce were quite sympathetic, though pessimistic about organisational possibilities in handicraft economy, others did not show interest in handicraft industries as such and were indifferent to the subject under survey.¹³

Merchant and Craft Guilds were as well established in medieval Europe as in ancient India. But, unlike in India, they did not have to face the apathy or oppression of alien rule except in some Balkan countries and parts of Spain. Most of them were, therefore, in a position to preserve their identity and

12. *Ibid.*, p. 20.

13. *Ibid.*

tradition of autonomy till very recent times. In France, the old guilds existed right up to the French Revolution in 1789. In Germany, they survived till 1869. Old European guilds, however, came in conflict with the rising modern national State which resented their autonomous control of large and important segments of economic life as well as their local power and prestige. In several European countries, beginning with England in the 16th century, they were forcibly suppressed and their properties, accumulated over generations of prosperous existence, were confiscated for public use. But at the same time, craftsmen and handicraft entrepreneurs were encouraged and helped to set up new associations better suited to modern needs. Immediately after or rather simultaneously with the suppression of the old guilds, new organisations of craftsmen and craft merchants cropped up in almost every European country. Europe has two international organisations also—The International Association of Crafts and the Council of Nordic Master Craftsmen.

The effectiveness of existing associations, particularly in terms of maintaining quality and standards, is a debatable issue. Nowadays Craft Associations, where they do exist, have been bodies of good intentions, without enforcing rigid standards voluntarily. The handicraftsman has been hard hit economically, and exposed to the same competitive mechanics as an Industrial worker. Thus we find Trade Unions among handicraftsmen, demonstrating the systems of collective bargaining and increasing wages, without the same concern for quality and high standards as his counterpart of yesteryear. While standards are attempted to be ensured by quality marking schemes, there is a fundamental difference between a labour of love and a wage earning exercise.

Master craftsmen must be provided an adequate livelihood to enable them to work single-mindedly. The State will have to replace the royalty of yesteryear, in the field of nurturing craftsmen, if the same high standards have to be revived.

The people must look upon handicrafts as 'objets d'art' and not as competitors of, or substitutes to, mass produced goods. Handicrafts need that special treatment and pampering which only can yield pleasurable results.

Since the Independence of India (August 1947) and particularly after the First Five Year Plan was launched concerted efforts are being made to resuscitate the small industries sector including cottage industries and handicrafts.

The All India Handicrafts Board was established in November, 1952, to study the problems confronting the development of Handicrafts, to advise the Government generally on the solutions of those problems, and in particular to improve and develop production techniques and new designs to suit the changing tastes, and to promote marketing in India and abroad. The Board was also required, as a technical body, to advise the Government on grants and loans to be given to State Governments, private organisations and institutes for financing activities necessary for the development and improvement of Handicrafts.

When the All India Board was formed the Handicraft Industries were in a very uncertain state, caught as they were in the backwaters of technology and exploited by callous middlemen, who were instrumental in creating high prices for the finished goods while keeping the artisan at bay in terms of wages. There was considerable frustration among craftsmen, who had to toil for long hours, and were barely able to make ends meet. The Craftsmen felt that they were fighting a losing battle as their markets were shrinking and a number of them gave up their traditional skilled work for want of full and fruitful employment. At the same time, a considerable section of the public opinion was cynical about the survival of Handicrafts, particularly due to the onslaught of inexpensive mechanised goods."

It was in these none-too-cheerful conditions that the All India Handicrafts Board was launched; it did not take the Board long to arrive at the most immediate step required, which was to dispel the prevalent cynicism. The only way was to demonstrate that handicrafts could be marketed in India and abroad in a much larger way than before.

Five pilot Centres and four Regional Design Centres at Bombay, Calcutta, Bangalore and Delhi were commissioned. Exhi-

14. Cf. Review of the Development of Handicrafts during Second Five Year Plan, All India Handicrafts Board, New Delhi, p. 3.

bitions of handicrafts were organised in India and abroad and a Handicrafts Museum was set up at Delhi. The total expenditure on the development of handicrafts in the First Five Year Plan period (1950-55) amounted to Rs. 25.87 lakhs* which rose to an impressive nine crores during the Second Plan period. A comprehensive survey on the marketing of handicrafts was undertaken which suggested future lines of action.

The objectives included, avoiding further technological unemployment, providing increased employment opportunities, and to structure an essentially decentralised society, for progressive economic development at a fairly rapid rate.

The Board constituted Advisory Committees for twelve important Handicrafts, including art metalware, wood work, dolls and toys, brocades, textile printing and carpets. Inter-alia the Craft Committees assisted in the formulation of programmes and recommended action on outstanding problems. Regional Offices of the Board were opened at Delhi, Lucknow, Calcutta, Madras and Bombay, and the Government also reinforced their handicrafts staff. Over a hundred sales emporia were commissioned which had an annual turnover of Rs. two crores. Forty-five exhibitions were organised in different parts of the world, including the U.S.A., U.S.S.R., Canada, Germany, East Africa and South East Asia. Three new design Centres, a craft Museum, a quality marking scheme and numerous socio-economic surveys on handicrafts were the results of the Board's activities. The average annual exports increased from Rs. 7.04 crores** in the First Plan to Rs. 9.67 crores in the Second and rose to over Rs. 20 crores per annum during the Third Plan period.

The Handicrafts and Handlooms Export Corporation of India with its offices and showrooms in foreign cities specialises in export promotion, and participates in numerous International Fairs and exhibitions. However, the need for posting knowledgeable personnel, particularly at fairs and sample Showrooms abroad cannot be overemphasised as the early experience in this regard has not been entirely happy.

Market Research in India and abroad should be undertaken on a scientific and elaborate scale and the findings communicated promptly to production centres.

Publicity and sales promotional activities need to be handled in a proficient and elegant manner as Indian Crafts have to compete not merely other products but better publicity in their favour. Wider use of handicrafts in public buildings and by Diplomatic and trade representatives abroad in their offices and homes could be a sure way of introducing crafts to the elite of large cities the world over.

Indian Handicrafts could forge strong cultural ties between India and other nations of the world and thus earn both friends and foreign exchange.

CHAPTER II

Technology, Designs and Quality Control

“Does the definition of aims and purposes make possible any generalisations as to characteristics of Intermediate Technology? The broadest generalisation one can make is about scale. The smallest scale compatible with efficient production is an obvious desideratum and a significant step in this direction is expected of all intermediary technology. Negatively intermediate technology would also be expected to keep down investment in fixed capital as low as possible; this would be balanced by there being no special emphasis on economy in inputs of labour, especially of those types which are not scarce in underdeveloped economies. These conditions arise out of relative paucity of capital, the tendency for fixed capital cost per unit of product to rise with diminution of scale and the redundancy of labour and its low cost. It is in this context that the problem of use of power may also become important.”¹

It has been increasingly felt that Handicrafts must be approached from numerous angles simultaneously and any attempt at tackling problems piecemeal will not be productive of tangible results. “In our judgement, the major single reason for most deficiencies in small Industries (of which Handicrafts are a part) is the lack of a systematic approach to the overall problem; better marketing, better financing, better raw-materials, better

1. Prof. D.R. Gadgil—Notes on Rural Industrialisation, “Artha Vijnana”, Journal of Gokhale Institute of Politics and Economics, Poona, Vol. VI, No. 1, March 1961, pp. 10-11. Also submitted to Rural Industries Planning Committee, Planning Commission, Govt. of India, Nov. 1963.

finish, better equipment, better power facilities, better design, etc., are often thought of as separate remedies, any one of them sufficient for the cure. It is true that in some rare instances this may happen to be so, but if, let us say, a better design is applied to a product made of deficient material, or better equipment is used for the making of badly designed goods, little benefit could be expected, even if more abundant financing or marketing facilities were available. To make it worse, lack of direct channels between higher levels of competence and the small industries leaves obscure the conception of what good quality really is.”

The concept of Research in Handicrafts can be most fruitfully extended in the field of improved techniques of production though there is obvious scope for Research in Designs also. A major complaint against Indian Handicrafts and indeed against the entire sector of small scale and cottage industry is that there is too much of adherence to age-old hereditary techniques which are not merely outmoded but cannot be termed as economical. There is an increasing awareness of the fact that improved technology in the field of small industry would be a major step-in-aid to their growth.

“Standing still and using age-old traditional ideas for methods of work in small enterprises, in our belief, is a very questionable approach at a time when great emphasis for need of rapid development of both social and economic standards is being advocated by the leaders in India through its commendable Five Year Plan.... Many workers have developed amazing skills, remarkable ability and precision. As individual Virtuosi they are admirable but we cannot help feeling that natural talents are being wasted in a hopeless and losing race against modern technology.”

“Before we outline what we consider the correct systematic approach we have to touch upon a point frequently raised during our interviews, namely apprehension that labour saving equipment and the methods would increase unemployment. On the

2. The Report on Small Industries in India by the International Planning Team of the Ford Foundation, 1951, p. 15.

3. *Ibid.*, p. 13.

contrary such improvements mean more and better products at lower and lower cost in prices and result in greatly expanded demands and markets. It generates higher and higher wages, greatly expanded employment and higher standards of living. It is our belief that such apprehensions are often due to reluctance to analyse the position of a given trade and to face, if necessary, the need for a thorough reorganisation and a new approach. Such reluctance and failure to appreciate the proper concept, we think, is responsible for many a difficulty observed. They are real obstacles in the way of any organic effort of improvement.”

“Widely spread fears of greatly increased unemployment through mechanisation are not well founded. There are no reasons to believe that, in a huge and potentially wealthy country, such as India, normal development will not take place. Better and cheaper production will allow both larger sales and higher wages which will create new and greatly increased employment everywhere. Any temporary unemployment resulting from the application of increased production process should be absorbed by setting in motion a challenging Public Works Programme. This is a capital investment in the human welfare of the people of this nation and it should be made.”

It has been agreed in responsible quarters that even in the field of Handicrafts a certain amount of mechanisation ought to be introduced in order to obtain the twofold objective of better finish and rationalisation. Apart from the National Research and Design Centres conducted under the aegis of the All India Handicrafts Board a Research and Design Centre is operating at Hyderabad as a scheme of the Directorate of Industries and Commerce of the Andhra Pradesh Government. The Design Centre is enquiring into techniques of production obtained among the States' Handicrafts with a view to evolve ways and means of improving tools and techniques. The possibility of employing small machines has met with some success in Silver filigree, Kondapally Toys and Tie and Dye Textiles. While mechanisation of certain processes will indeed be highly desirable, and may contribute towards better finish and lessening

of costs, an important aspect of the problem is that, the Artistic component of a Handicraft should be essentially an operation by the hand. It is only then that it will be possible to preserve the unique nature of Indian craftsmanship and save them from the cheap drabness of mass produced articles.

“The idea is not to quarrel with what has been developed—good, bad or indifferent for there were possibly other important tasks which needed first attention in the past years—but to urge overall awareness and an imaginative and systematic Research and Action programme to furnish the Cottage Industries with the best of technical competence. Even when accepted as necessary it is certain that technological changes in the Cottage Industries will not be easy to bring about. The big industries are in a fortunate position as the world’s best technological leaders are engaged in serving them. Who are working and can work for this seemingly unattractive field unless the State or International Agencies show enough vision and engage some of the topmost creative minds and turn them to this task? It is a challenging and highly rewarding task for its results may benefit not only India but many other countries having comparable conditions.”

An important implication of the introduction of technology in the field of Handicrafts is the capacity of the Artisan to adapt himself to the changed technique and medium of production. Hitherto the skills of craftsmanship were inherited and the child played and grew in an atmosphere heavy with the practice of a craft. The child unconsciously picked up know-how and techniques and, even while very young, had some part to play in the process of production. This part became difficult as the child grew, and by the time he became a youth he had also grown into a full-fledged craftsman. An investment in training which hitherto was superfluous may now become imminent with the introduction of mechanisation and technology at certain stages of production. However, the advantages of improving the tech-

niques of production far outweigh the problems that may be felt.

The Central Handicrafts Development Centre at Bangalore organised by the All India Handicrafts Board has an impressive record of applied research in improved tools and techniques in Handicrafts production. It is the first full-fledged technical service institute in the field and has made significant contributions in designing simple tools for metal casting and allied fields. However, as Mr. Jain has observed, the problem needs the support of International Organisations and greater financial assistance from the State in addition to the association of top class research personnel⁶ if desirable and enduring results are to be obtained.

The traditional designing of Indian Handicrafts is, on account of the social and psychological background, a complex amalgam of the influence of religion, the whim and vanity of rulers and lords, and the elemental experience, aesthetic genius and technical competence of the craftsmen. As one looks upon the traditional craft products of this country, one comes across patterns of awe-inspiring beauty, expressing a vision and variety of form and feeling which has few parallels in the art treasure of the world. Here one can have a glimpse of the entry of the Indian people in all its infinite moods.⁷

In the field of Handicrafts Designing considerable spadework has been done in reviving several traditional designs. India has a wealth of designs and as Mrs. Ruth Reeves had observed: "India is a Museum without walls; all over the country are treasures of temples, sculptures, frescoes and textile prints that speak volumes of the aesthetic evolution of the country thousands of years ago. So robust is the Indian craftsman's reluctance to take leave of their traditional craft materials, techniques and design roots that it might almost be called one of their most outstanding culture patterns. Perhaps this is the reason why India is virtually

6. *Ibid.*

7. Survey of Indian Handicrafts. Report on the Marketing of Handicrafts. Sponsored by the All India Handicrafts Board, 1955. Ch. 8, 431-435.

the only country in the world today which stands with one foot still firmly planted in a Handicraft era reaching back over a time cycle of five millennia.⁸

Designing was always functional. In other words, except for the religious images made for worship, all else was for utility. Rather it was the other way round; whatever articles, however mundane their use, had to be beautiful. Aesthetics was not divorced from utility. Man does not merely need things, he wants them to be good to look at. There is an innate irrepressible hunger in us which craves for something better than the ordinary. The Cire perdue process is a lasting and living homage, of this desire to experience an elation, lifting man out of the common and the drab and make him an inspired soul.⁹

The Report on Small Industries in India by the International Planning Team of the Ford Foundation (1954) has made the following recommendations for Designs and methods of supply for quality products in Handicrafts and small industry:

Indian Handicrafts and Small Industries could produce and sell more both in India and abroad, and tap the growing "Quality Market" as soon as modern requirements of production and supply are met. To increase the distribution and sales of articles, however, the most urgent general needs are:

1. Good Design and technical quality,
2. Reliable organisation of supply,
3. Coordinated promotion in India and abroad.

Some constructive efforts to meet these needs are now being made, but the Study Team is convinced that more substantial and faster progress is needed and possible, and would be assisted by setting up the following three types of organisations as part of a long term development programme. These organisations should work in close co-operation with existing institutions in the field.

8. *Cire Perdue Casting in India* (Published by Crafts Museum, New Delhi), p. 14.

9. Smt. Kamaladevi Chatopadhyay, Chairman All India Handicrafts Board in her Foreword to Mrs. Ruth Reeves' "Cire Perdue Casting in India."

A national school of Design to serve as a centre for creative studies in design and fashion. The basic function of the school would be to design and, in its workshops, prepare improved models suitable for commercial production and arrange to get these models in production; to train potentially good designers and conduct research; to organise exhibitions, information services and promotional activities and establish a network of communication between craftsmen, designers and the public.

The School should be established and supported by the Central Government and have a field organisation in contact with producers. It should be headed by an international authority of highest competence with an independent advisory board chosen on merit alone, and a carefully trained and selected staff. It should be a completely independent institution. Income from its fees should be directly for expansion of its work.¹⁰

To introduce innovations in designing and infuse fresh life among Handicrafts, the Board set up four regional design centres, one each at Delhi, Calcutta, Bangalore and Bombay during the First Five Year Plan. In addition the Board assisted various State Governments in setting up their own Design Centres at Uttar Pradesh, Kashmir, Assam, Madhya Pradesh, Bihar, Rajasthan and Punjab.

To stimulate the development of designs on a national scale, the Board organised three National Design competitions covering Pottery, Textiles, Embroidery and Toy Crafts; Carpet, Wood Work and Metal Crafts, and Metalware and Jewellery. An annual "design album" containing photographs of the latest designs evolved at the Board's centres is published and the Regional Design Centres arrange periodic exhibitions to popularise their activities. A number of foreign experts specialising in particular fields are associated with the activities of the Design Centres to enhance the value of their contribution to design development. Among the experts so far associated with the Board/Design Centre are:

10. *Report on Small Industries in India* by the International Planning Team of the Ford Foundation, 1951, p. 4.

<i>Name</i>	<i>Subject</i>
1. Mrs. Lisbet Holmes	Textile Designs—Research in foreign fashions, Reorientation of old Designs and their reproduction. Experiments with new designs and colour combinations in Kashmir embroidery, etc.
2. Mr. Wilhelm Moosch	Ceramics expert attached to the Calcutta Design Centre. Conducted five hundred experiments in various clay mixtures, colour combinations, clay bodies, glasses, etc. New Designs made include: Tea sets, Lemon sets, Ash trays, Pin cushions, etc. He has also created firing equipment with indigenous material and conducted training courses for Indian potters.
3. Miss A.S. Hansen	Doll Expert. Evolved a number of New Designs for Dolls with Indian characteristics. Her Dolls have been well received in India and Europe.
4. Miss Jane Liu and	They experimented with new merchandising techniques in the Central Cottage Industries Emporium, which included improved display, cataloguing, planning in buying, design development, labelling and personnel management. Their efforts have achieved substantial results.
5. Miss. Vidya Chandra	
6. Mrs. Ruth Reeves	She conducted an extensive historical and aesthetic survey of Indian Handicrafts. She toured the country extensively for the purpose and collected photographs and other material. She has written "Cire perdue casting in India" which is published by the Crafts Museum, New Delhi.
7. Mr. Gunter Eberle and	They evolved a number of samples of furniture items for reproduction. Their special line was
8. Mr. Jens H. Jorth	

Subject

portable furniture for exports. They have also trained numerous craftsmen in improved designs which has helped in the export trade.

Mr. L. Martinuzzi, Vice-Chairman of a leading departmental stores in New York, visited the country and made useful suggestions on the long range planning for Indian Handicrafts. He placed much emphasis on exploration of rural markets and on contacts between Indian Craftsmen and their counterparts all over the world. Other experts included Madame Gross, a Fashion designer from Paris, Mr. and Madame Roger Model, fashion handbag designers from Paris and Mr. Peter Kaufmann a general merchandise specialist from Switzerland. The main contribution made by the experts lies in providing design guidance to craftsmen to suit changing tastes in India and abroad. Some of the experts have also trained Indian Craftsmen in improved techniques of production.¹¹

All these efforts at improving, evolving and reviving designs in various crafts have had a considerable impact on the trade and there are many excellent designs currently available in the market. Traditional designs have been drawn upon heavily and many of the great masterpieces have been reproduced. Paintings from Ajanta, Moghul miniatures, reproductions from Halebid, Khajuraho, Konarak and Lepakshi are but some of the many traditional designs in vogue today. Persian designs, which have made a mark in the carpet industry, also continue along with numerous simplified floral patterns and geometric designs for export markets. The design movement in handicrafts has to be continuous and dynamic process constantly studying the tastes of the consumers while subtly influencing them into buying the best.

11. *Source*: Review of the Development of Handicrafts during the Second Five Year Plan—All India Handicrafts Board, Ministry of Commerce and Industry, Govt. of India, New Delhi, pp. 15-16.

The quality control of Handicrafts is restricted to raw-materials primarily. Once the proper grades of raw-materials are used each article has to be judged by an expert and receive certification that it is worth being Quality marked. In Handicrafts the finished product can be standardised to the extent of physical dimensions, but the excellence of design or the standard of finish cannot be specified in any elaborate manner. Thus the quality marking examiners and superintendents have to judge each individual piece from the point of view of total finish.

Quality Marking Schemes are being extended on a phased programme to cover all the leading Handicrafts and specifications are laid down in consultation with the Indian Standards Institute.

CHAPTER III

Marketing and Export Promotion

Handicrafts are products of a very special nature being at once "objets d' art" and consumer goods. Their marketing poses issues of a nature that are unique. The two main problems in the marketing of Handicrafts are:

- (a) It is not possible to produce Handicrafts "en masse" and hence their wide scale commercialisation becomes restricted.
- (b) As Handicrafts carry the stamp of individual artisans their standardisation becomes problematic. These two factors have made large scale marketing of Handicrafts, particularly in Western countries, a difficult proposition.¹

The bane of Handicrafts marketing is the large number of middlemen that thrive at the expense of the artisan on the one hand, and consumer on the other. Private producers of Handicrafts have limited capital resources and as such cannot organise a steady market for themselves.

There is a striking resemblance in the marketing of agricultural produce (in India) and Handicrafts. Both the peasant and the artisan suffer from a lack of bargaining capacity as they are poor; hence they are unable to hold on to their products till they find a fair price. The Handicrafts artisans are also handicapped by the limited availability of designs, improved techniques and market research guidance.

1. Cf. *The Theory of Economic Growth*, W. Arthur Lewis, George Allen and Unwin Ltd., London, 1955, p. 138.

Marketing of Handicrafts can be classified into private, co-operative and public sectors. Individual artisans sell their goods in village shandies, and fairs, while some hawk them. A few of the Co-operative Societies have marketing sections which organise their sales. Organisations have also been formed for exporting Handicrafts regionally and productwise.

In the Co-operative sector, the Indian Co-operative Union, which is operating the Central Cottage Industries Emporium at Delhi, is a major marketing organisation. State run emporia are widely prevalent and have numerous branches all over the country.

One of the earliest surveys conducted under the aegis of the All India Handicrafts Board was a survey on Marketing Handicrafts. The report analysed the problem in India and made far reaching suggestions both in structural and operational matters. The survey has provided the requisite factual background and basis for launching an integrated programme for the development of Handicrafts.

Besides expansion in sales by the one hundred and fifteen Emporia, a number of private parties have entered the retail business in Handicrafts. This is in addition to existing general merchants, gift shops and departmental stores, which have included Handicrafts in their items for sale.

The Victoria Technical Institute, Madras, which catered primarily to foreign buyers some years ago, reported that not only had their volume of business expanded by one hundred and eighty-three per cent in the last five years but the purchases made by our own people have increased rapidly. The Central Cottage Industries Emporium, New Delhi, reported that their sales registered an increase from Rs. 18.23 lakhs to Rs. 26.75 lakhs.²

Another evidence of wider distribution of handicrafts in the country is the number of shops and stalls that have been

2. Source : Draft Review of the Development of Handicrafts, 1956-61, All India Handicrafts Board, Ministry of Commerce and Industry, New Delhi, p. 11.

opened, in recent years, at tourist centres, airports and railway stations.

One of the items in the programme of "Expansion of Marketing" adopted by the Central and State Governments is Inter-State trading in Handicrafts. Emporia run by each State Government offer reciprocal facilities for sale of crafts from other States. During the last five years considerable movement of goods from one State to another has taken place mainly through co-operative or private marketing organisations. While most of the State Governments have agreed to the arrangement in principle, only a few of them have made an earnest beginning.

In pursuance of the recommendations of the Marketing Seminar held in 1958, the Board set up a Central Handicrafts Marketing Committee consisting of representatives of State Governments, Emporia and other marketing agencies. The marketing committee had the following terms of reference:

- (a) to define general principles for the working of the public emporia, review their progress periodically and recommend measures to remove their difficulties;
- (b) advise on matters relating to the extension of organised public and co-operative marketing, particularly with a view to promoting Inter-State trade in handicrafts; and
- (c) to suggest measures for publicity, market research, commercial intelligence, quality control and any other step to promote marketing of handicrafts.

A notable improvement in the marketing policy of the Emporia has been the replacement of consignment system by direct purchase. It is claimed that emporia purchase seventy per cent of their products against cash payments, as against ninety per cent of stocks they received on consignment basis some years ago. Thus the craftsmen are relieved of the burden of waiting for payment.

An attempt was made to collect sales figures from different emporia on a craftwise basis. Considerable difficulty was experienced as the emporia were not maintaining sales records in a systematic way. On the basis of information available two mar-

ket research news bulletins were issued—one covering sales of Rs. 80 lakhs for ten emporia and the second covering sales of Rs. 1.42 crores for sixty-one emporia. The bulletins project the sales trend of different crafts over the different seasons of the year, and also provide a comparative study of sales in different emporia. Such analysis is essential in furnishing useful information which can assist emporia in formulating purchase policy and in guiding producers.

The object of marketing clinics arranged periodically is to make an on-the-spot appreciation of the crafts in terms of designing, production, costing, quality control, packing, merchandising, etc., with a view to finding increased sales possibilities for them, both within the country and abroad. Committees were formed to follow up the recommendations made craftwise and also to test the market reaction after incorporating the suggested improvements in the articles. The follow-up action reveals that articles, in which improvements were made, are more acceptable to the emporia and ultimately to the consumers.⁴ Clinics in regard to all States/Regions must also be organised to enable a national perspective plan for the marketing and export of Handicrafts.

Export Promotion

Even before the planned development of Handicrafts was initiated exports were made to many countries.

After the formation of the All India Handicrafts Board considerable publicity was afforded to Indian Handicrafts at exhibitions in various world capitals.

The average annual exports increased from Rs. 7.04 crores in the First Five Year Plan, to Rs. 9.67 crores in the Second Plan and rose to over Rs. 20 crores in the Third Plan period.

The trend in Exports reveals the large and growing potential that exists for Indian crafts. This is particularly significant when the country is striving its utmost to earn foreign exchange. An important factor here is that the inputs for most Handicrafts are of an indigenous nature; the limited use of capital

4. *Ibid.*

equipment, investment, labour intensity and traditional skills make, handicrafts an ideal foreign exchange earner for developing countries.

The Export trends to certain countries reveal remarkable results. Exports of Handicrafts to the United States of America rose from Rs. 140.9 lakhs in 1957 to Rs. 221.1 lakhs in 1960. The U.S.S.R. which had not imported any handicrafts till 1955 has since imported Rs. 33.01 lakhs worth during the Second Five Year Plan period. Similarly, East Germany, Poland, Czechoslovakia and Yugoslavia have begun to import Indian Handicrafts.⁵

A number of foreign buyers particularly from the United States of America and continent have been visiting India in recent years⁶ for making on-the-spot selections of Handicrafts. Indian Handicrafts are also sold through special exhibitions organised by foreign importers. M/s Bon Marche in Paris, M/s Selfridges in London, M/s Crome and Goldschmidt in Copenhagen, M/s Loebb Bros. in Berne, M/s Cluett Peabody and Co. in New York, and La Binecente in Milan organised special exhibitions of Indian Handicrafts in their countries.⁶

An important development in the exports of Handicrafts has been the setting up of organisations such as the products of India, New York and Export Development Corporation, San Francisco. These organisations have been set up with U.S. capital and are devoted entirely to the import and marketing of Indian Handicrafts.

A number of services including trade enquiry service, commercial information service and commercial intelligence service have been started by the All India Handicrafts Board.

Directories of foreign importers and Indian exporters of Handicrafts have been prepared for the benefit of both the exporters and importers. The All India Handicrafts Board has also been extending assistance and encouragement towards the formation of export organisations by craftsmen.

5. *Ibid.*

6. *Ibid.*

The need for vigorous publicity and sales promotional measures is being met to some extent. Exhibitions form an important plank in sales promotional activities and are organised periodically in India and abroad. Indian participation in world fairs and International exhibitions has also been instrumental in popularising Indian Handicrafts in foreign countries. The All India Handicrafts Board participated in 84 exhibitions among which thirty-nine were held in India and forty-nine abroad.

Defective personnel selection, poor quality, delays in shipment, high tariffs, scanty market research data and unbusinesslike attitude in marketing and export promotion are live problems which call for remedial action. Given sound support Indian handicrafts are capable of establishing themselves in any market. Other problems which need to be attended to are Quality Control, faster supply schedules, good packing, streamlined publicity and above all a commercial approach.

Problems in Effective Marketing

The concept of creative marketing has not made itself felt, to an appreciable degree, in the country as a whole, and in the Handicrafts sector particularly. Some important problems in marketing are:

1. Inadequate publicity and sales promotional activities in India and abroad;
2. Lack of Market research and analysis of consumer preferences in specific markets;
3. Limited indication of the results of market research and consumer preferences to Design Centres and production units to meet effective demands;
4. Inadequate follow-up action on contacts made during Exhibitions in India and abroad with a view to establishing lasting and fruitful trade contacts;
5. Dearth of literature, including illustrated brochures, leaflets, hand-outs, highlighting the salient features of particular crafts.

These problems may be taken care of by—

6. Greater co-ordination between the Ministries of Information, Commerce and Tourism, with a view to

making Handicrafts an integral part of their operations.

7. The manufacture and use of Handicrafts as souvenirs for tourists. The providing of attractive commissions, discounts, and incentives to the private sector for marketing and sales promotional activities in Handicrafts.
8. The introduction of elegant and attractive packing material for Handicrafts including gift packing, particularly for export.
9. Research in packing materials particularly for fragile items at inexpensive rates.
10. A network of National emporia in leading cities of India and abroad. These emporia should not merely market Handicrafts but function as clearing houses for consumer preferences and market research activities.
11. The inclusion of Handicrafts as compulsory items of export in bilateral and multilateral trade agreements.
12. Rationalisation of Import duties: Import duties are leviable on Handicrafts in different countries varying from 18-100 per cent. Baghdad and Philippines charge import duties at 100 per cent while the duties of other countries are 60 per cent and sometimes even more. Negotiations must be conducted with the ministries of commerce in these countries to enable Indian handicrafts to be exported at reasonable import duties.
13. Sample show rooms in important parts of the world, with knowledgeable personnel, will help in the display of handicrafts and the furnishing of trade terms, production schedules, costs, etc., at the convenience of the buyer.
14. The compulsory use of Handicrafts in Indian Embassies, Trade commissions and Consular offices all over the world will introduce the products to the elite in the capitals of the world, and stimulate appreciation. Similarly the extensive use of Handicrafts in Public buildings will provide effective demand for a high degree of craftsmanship in the country.
15. Mobile exhibitions of Handicrafts, including floating fairs, will acquaint people with Crafts from other areas and will stimulate interest if accompanied by demonstration.

The strategy in the Promotion of handicrafts, particularly abroad, should be to project each item as an "Original" thus eliminating the demand for large numbers of the same product, while increasing the respect for individual pieces. An unfortunate trend in recent years is that Indian Handicrafts are being made to compete cheap machine-made products, and are not able to hold their own in terms of price. The eagerness to reduce prices results in badly finished crafts which neither brings appreciation nor foreign exchange. There is an urgent need for a change in the promotional strategy and concentration on quality shops for the sale of Handicrafts. Indian crafts must be rescued from the pavements and Dime-stores and rehabilitated in more respectable surroundings, if they are to create a worthwhile image of our craftsmanship.

The Commerce Minister has called for the organised production of exportable Handicrafts under close supervision of knowledgeable personnel. This could be the answer to the large scale exports of Indian Handicrafts.

CHAPTER IV

Handicrafts in Andhra Pradesh

The details of amounts earmarked during the First Plan period for handicrafts are unavailable as the sector was clubbed with Cottage Industries and Khadi and Village Industries for purposes of Financial allocation. However, it has been computed that the amount spent on Handicrafts during the First Plan was Rs. 63,984.

In the Andhra Pradesh Plan, the following amounts were earmarked for the Handicrafts Sector:¹

TABLE

<i>Plan</i>	<i>Provision</i>	<i>Expenditure (Rs.)</i>
*Second Plan	19.82 lakhs	18.45 lakhs
Third Plan	18.75 lakhs	11.24 lakhs (for 4 years) 6.73 lakhs for 5th year

The objectives included, avoiding further technological unemployment, providing increased employment opportunities and to structure an essentially decentralised society for progressive economic development at a fairly rapid rate.²

It may be seen from the foregoing that the expenditure is less than the provisions, the latter having been lesser in the Third Plan than in the Second. Out of the allocation of Rs. 8 lakhs during 1961-62, Andhra Pradesh utilised only Rs. 1.73 lakhs which works out to less than 20 per cent; with a larger allocation of Rs. 10 lakhs, Jammu & Kashmir spent Rs. 3.04 lakhs, i.e., over 30 per cent while Kerala spent over 66 per cent, Madras over 33 per cent, Punjab about 90 per cent.

1. *Source:* Directorate of Industries and Commerce, A.P.

• First Plan figures are not available separately.

2. *Source:* Second Five Year Plan.

Even in regard to utilisation of Central assistance (grant and loan) Andhra Pradesh was among the most backward States.

The situation improved during 1962-63 when the actual expenditure was Rs. 4.24 lakhs against the allocation of Rs. 5.70 lakhs, which accounts for about 80 per cent. The State ranks 6th in the All India table for use of funds. There has been a similar trend in utilisation of Central Grants and loans usage.

In regard to the amount disbursed as loan from Block loan funds, Andhra Pradesh's performance is not particularly impressive. During 1961-62, a sum of Rs. 17,150 was disbursed as loan. This does not compare well with Rs. 2,88,000 disbursed in Gujarat, Rs. 5,27,850 in Rajasthan, Rs. 3,01,957 in Madhya Pradesh and Rs. 2,25,000 in Madras.

Andhra Pradesh ranks 6th among emporia in the country in regard to sales with a turn over of Rs. 6.12 lakhs in 1960-61. It lost one place further in 1961-62 when the Sales dropped to Rs. 5.35 lakhs but made up the position in 1962-63 with a turn-over of Rs. 7.38 lakhs while ranking 3rd in the country among State Emporia.

The foregoing analysis clearly indicates the need for the State to energise its functioning in availing of facilities, particularly financial, as this could create the tempo for wider and deeper operation.

It is suggested that certain structural changes at the production and supervisory levels may be made to take advantage of larger outlays that may be possible in future plans. These would include the commissioning of New Units, the expansion of existing ones and enlarged facilities in marketing and design development. The commissioning of New Sales Emporia both in the State and in leading cities of the country will be instrumental in taking the crafts of the State to New Markets, thus calling for expanding production activities.

Andhra Pradesh has been exporting Handicrafts valued at Rs. 75 lakhs per year; the bulk of it being crochet lace which alone accounts for Rs. 40 lakhs. Pile carpets, Bidri, Toys and Nirmal are among the other exported crafts. There is thus the urgent need for organising qualitative production of exportable

crafts, and a wider and more vigorous participation in International fairs and exhibitions. The Government of Andhra Pradesh has sponsored a new department of Commerce and Export Promotion which, it is hoped, would address itself to the export of Handicrafts. At present the exports are restricted to a very few crafts. From the reaction of tourists and foreigners residing in Andhra Pradesh, many of the crafts would be warmly welcome abroad. There is thus the need to study the preferences of specific markets abroad, so that the exports could grow.

Conclusion

The mid-term review of the progress of handicrafts in the Third Plan presents a very mixed picture. On the one hand, there is evidence of development of domestic and foreign markets for handicrafts; on the other, there is evidence that a fuller potential of development is not being harnessed. The real-wage structure is static despite the increase in annual earnings. The allocation provided for development of Handicrafts programme is merely of a maintenance level. Thus there is hardly any scope, within the available resources for energising and expanding the sector and undertaking many urgently needed projects and measures.*

Though the mid-Third Plan review presents a mixed picture, the All India estimates reveal that over a million people are employed by the sector producing Rs. 100 crore worth products. In Andhra Pradesh, the value of Handicrafts produced is estimated at Rs. 80 lakhs per year employing over one lakh of people both in the Co-operative and Private sectors.

INVESTMENT AND PERFORMANCE

The Investment

The allocation for Handicrafts during the Second, Third and Fourth Five Year Plan periods are as follows:

First Plan—Rs. 0.64 lakh.

Second Plan—Rs. 19.27 lakhs.

Third Plan—Rs. 18.75 lakhs.

Fourth Plan—Rs. 1.25 crores have been earmarked.

1. *The Investment* in the sector rose from Rs. 63,984 in the First Plan to Rs. 19.27 lakhs in the Second Plan—an impressive improvement of over 1,800 per cent.

2. *The Employment* (in the Co-operative and Public sectors) rose from 166 in the First Plan to 831 in the Second and went on to 2,219 by the end of Mid-Third Plan period registering an increase of nearly 800 per cent from the First to the Second Plan and nearly 300 per cent from the Second to mid-Third periods.

3. *The Production* of Handicrafts in the Co-operative and State sectors rose from Rs. 4.32 lakhs in the First Plan to Rs. 25 lakhs in the Second Plan reflecting an increase of over 600 per cent.

4. *The Sales* through Government Emporia rose from Rs. 11.42 lakhs in the First Plan to Rs. 39 lakhs in the Second Plan showing an increase of over 400 per cent.

Other factors reflecting the self-sustaining growth of the sector are an increase of 1,500 per cent in the number of persons trained, 600 per cent increase in the number of crafts started, 300% increase in the number of Sales Emporia, over 600 per cent increase in the number of Schemes implemented, over 500 per cent increase in the amount of loan sanctioned and over 700 per cent increase in the number of new co-operative societies, as between the First and Second Plan periods. There has been a further, though less spectacular, improvement during the Third Plan period.

The foregoing results have been obtained largely within the frame-work of existing administrative and supervisory machinery. Even better and Quality-oriented results would be possible with trained and competent field and supervisory staff.

Handicrafts can effectively participate in a programme of full employment with their small-size and labour-intensive characteristics. Their low-capital-intensity, inexpensive and limited training for artisans, use of indigenous raw material are ideally

suited for developing countries. They will besides be of the quick investment type and by carrying the jobs to the workers can overcome the difficulties of territorial-immobility.

The development of Handicrafts can be linked with a programme of town-centring in locating new enterprises and thus replace the Industrial Conurbation in metropolitan centres. Agro Industries could thus form the basis of Growth of Small-sized towns, and the Handicrafts Sector would provide spare time employment to the peasant and his family, thus supplementing their income. This is particularly relevant in the context of seasonal unemployment in the Agricultural sector.

And finally, one cannot deny that there will remain a large scope for small industry even after a maximum scheme for large scale industries has been executed. (As has been borne out by actual conditions in many European countries, quoted later).

The contribution of Handicrafts to the Small Enterprise Sector in the State Income is 0.14 per cent only. This compares unfavourably with the corresponding National Income figure of 14.3 per cent.

The capital output ratios for some important Handicrafts are as follows:

- (1) Nirmal .. 0.12
- (2) Bidri .. 0.24
- (3) Himroo .. 0.41.

The average capital output ratio for industries covered by census of industries is 2.48 for 1958.

The average capital output ratio for three Handicrafts Industries in Andhra Pradesh is 0.26 for 1958.

The foregoing analysis strongly suggests that the low capital output ratio in Handicrafts makes the investment required the lowest in the economy compared to outputs.

The Analysis in the last Chapter, "Retrospect and Prospect", also highlights the fact that the productivity per worker in handicrafts is 198.8 per cent of the wages paid to him and that productive capital used per worker is Rs. 97.93.

TABLE 1
Particulars of schemes relating to handicrafts implemented during the I, II & III Five Year Plan periods in Andhra Pradesh

Sr. No.	Item	I Plan per-iod	II Plan per-iod	(Rupees in Lakhs)									
				III Plan Period				1962-63			Provision for 1963-4 (Estimate)		
				1961-62		1962-63		1962-63		Non-Plan	Total		Total
				Plan	Non-Plan	Plan	Non-Plan	Plan	Non-Plan		Plan	Non-Plan	
1	2	3	4	5	6	7	8	9	10	11	12	13	13
1.	No. of schemes implemented	6	39	30	16	46	73	14	87	61	13	7	7
2.	Amount sanctioned : Grant	0.64	15.07	2.87	6.40	9.27	4.25	7.09	11.35	3.78	6.96	10.76	10.76
	Loan	0.96	5.56	5.28	-	0.28	1.80	-	4.80	0.25	-	0.25	0.25
	Total	1.60	20.63	3.15	6.40	9.55	6.25	7.09	13.15	4.03	6.96	10.99	10.99
3.	Amount utilised : Grant	0.49	13.63	1.45	6.00	7.45	1.71	8.23	9.95	-	-	-	-
	Loan	0.92	3.77	0.28	-	0.28	1.79	-	1.79	-	-	-	-
	Total	1.41	19.40	1.73	6.00	7.73	3.50	8.24	11.74	-	-	-	-
4.	No. of persons benefited	166	831	-	-	1155	-	-	2115	-	-	2219	2219
5.	No. of persons trained	20	300	-	-	63	-	-	91	-	-	91	91
6.	No. of Handicrafts Coop. existing at the end of Plan	4	28	-	-	29	-	-	46	-	-	46	46
7.	No. of crafts covered	4	24	-	-	25	-	-	26	-	-	26	26
8.	No. of common facility centres provided	-	7	-	-	3	-	-	3	-	-	3	3
9.	No. of Sales Emporia functioning at the end of Plan	2	7	-	-	7	-	-	7	-	-	7	7
10.	Value of goods produced by organised units	4.32	25.00	-	-	6.00	-	-	.81	-	-	10.81	10.81
11.	Value of sales conducted by the Govt. Emporia	11.42	39.00	-	-	9.34	-	-	11.49	-	-	14.00	14.00
12.	No. of Crafts covered	-	4	-	-	5	-	-	6	-	-	7	7
13.	Value of goods Quality-marked	-	2.29	-	-	6.19	-	-	6.34	-	-	9.00	9.00

Source : Directorate of Industries & Commerce, Government of Andhra Pradesh.

A capital investment of Rs. 97.93 will yield a product of Rs. 788.2. Here again the low investment, high productivity and labour intensity is brought out conclusively highlighting the useful role the sector can play in the State's economy.

Table reflects the particulars of schemes relating to Handicrafts implemented during the First, Second and Third Plan periods in Andhra Pradesh. It may be seen from the table that the number of schemes implemented rose from 6 in the First Plan to 39 in the Second Plan and 46 in the Third Plan. The amount sanctioned under 'Grant' also showed an impressive rise from Rs. 0.64 lakh in the First Plan to Rs. 15.07 lakhs in the Second Plan and was estimated to be Rs. 10.74 lakhs till the end of 1964, during the Third Plan. The loans sanctioned also showed an upward trend and registered an increase from Rs. 0.96 lakh in the First Plan to Rs. 5.56 lakhs in the Second Plan. The total amount sanctioned in terms of grants and loans during the First Plan was Rs. 1.60 lakhs which showed a spectacular increase to Rs. 20.63 lakhs during the Second Plan. But the amount utilised was always short of the amount sanctioned and reflected Rs. 1.41 lakhs during the First Plan, which rose to Rs. 19.40 lakhs in the Second Plan. The number of persons employed rose from 166 in the First Plan to 831 in the Second Plan and 2,219 by the end of 1964 during the Third Plan, in the Co-operative and Government sectors. The number of Handicraft Co-operatives rose from 4 in the First Plan to 28 in the Second Plan and to 46 till the end of 1964, during the Third Plan. The value of Handicrafts produced rose from Rs. 4.32 lakhs in the First Plan to Rs. 25 lakhs in the Second Plan and was estimated at Rs. 25 lakhs by the end of 1964. The sales also showed a steady upward trend and rose from Rs. 11.42 lakhs in the First Plan to Rs. 39 lakhs in the Second Plan and were estimated to be Rs. 35 lakhs by 1964 during the Third Plan. The value of quality marked goods also rose from Rs. 2.29 lakhs in the Second Plan to Rs. 9 lakhs by the end of 1964.

It will thus be seen that there has been a steady growth of Handicrafts in Andhra Pradesh in regard to amounts sanctioned and utilised, number of persons benefited and trained, number of handicraft co-operatives covered, number of crafts covered,

Common Facility Centres, Production Sales and quality marking.

As per the directives of the All India Handicrafts Board, Co-operative organisation has been adopted as the pattern of development in the Handicrafts Sector. Almost all the crafts have been brought under the co-operative fold or departmentally organised units and the benefits in the shape of general services and facilities are sought to be imparted to the artisans through these units. There are at present 46 Handicrafts Co-operatives covering 26 main crafts with a membership of over 2,100 artisans directly administered under the Handicrafts Plan programme. Besides, there are 100 other Industrial Co-operatives coming under the Handicrafts category consisting mostly of mat makers Co-operatives, Potters Co-operatives, Cane and Bamboo Co-operatives and Tailoring and Embroidery Co-operatives, which are administered under the Community Development Programme.

Financial assistance is the most important form of help rendered to the Handicrafts Co-operatives; they use this aid to increase their production and also avail subsidies towards managerial assistance as per the pattern of the Government of India.

The next form of assistance is in setting up of common facility centres; eight crafts in the State have availed this facility, viz., Bidri, Himroo, Ivory and Horn at Hyderabad, Pile Carpet Industry at Eluru, Toy Industry at Nirmal and Kondapalli, Kalamkari printing at Masulipatnam and Cane and Bamboo work at Araku. The Common Facility Centres are designed to provide ideal conditions of work, facilities of small machines including lathes, shaping and buffing machines, looms and tools, dyeing and carding equipment, etc. Besides, space for storage and display as well as facilities for training are available. Three more centres for the Toy Industry of Tiruchanur, Seamless Quilt making unit at Kuppam and Grass Mat Making in Nellore District have recently been sanctioned and work is expected to be started shortly. This is in addition to the extensions proposed for the Common Facility Centres already established for Bidri and Himroo units at Hyderabad, the Pile Carpet Industry at Eluru, the Toy Industry at Nirmal and the Kalamkari Industry at Masulipatnam. Even though these centres are placed at the disposal of the Handicrafts Co-operatives, the facilities obtain-

ing in these centres are thrown open to the artisans outside the co-operative fold also.

Training of artisans has been an essential feature of the programme of development in the Handicrafts Sector. The training programme during the First and Second Five Year Plans covered Toys, Musical Instruments, Kalamkari prints, Mats, Ivory and Horn, Nirmal Art and Cane and Bamboo. The training programme has a two-fold objective, viz., the revival of traditional crafts and training of artisans to meet effective demand. Advanced training in designs and production techniques through locally conducted training schemes, through deputation of artisans for advanced training in design centres, and other well known production units, outside the State, and conducting of apprentice training schemes are an integral part of the training programme implemented under the Plans. Special care is taken towards training artisans in crafts like Nirmal Art, Kalamkari printing and Artistic Wood work which have an export potential. Currently, training schemes are in vogue in Nirmal Art including traditional Nirmal and Miniature work, Kalahasti Kalamkari, Artistic Wood work of Udayagiri, Stone Carving of Durgi, Artistic Bamboo Work, Metalware, Zari and Zardozi, Brocades and Mat Weaving. In all there are over 90 artisans undergoing training.

Andhra Pradesh is the second State in the country to introduce Quality Marking in the Handicrafts Sector. Commencing with Nirmal work and Himroo at Hyderabad during 1960, the scheme has since been extended to Crochet Lace of Narsapur, Carpets and Durries of Eluru and Warangal, Bidri ware, Ivory and Horn work of Hyderabad, all of which have a wide export potential. Goods valued at over Rs. 6 lakhs are being Quality Marked each year. The scheme at present is on voluntary basis and the response from the various organisations outside the organised Sector has been reassuring.

In view of the vast popularity of the products of many of the State's Handicrafts in other parts of the country and abroad, designs have received increasing attention during the Third Plan period and the efforts of the State Government have been directed towards the revival and popularisation of traditional designs in several crafts including Traditional Nirmal, Tiruchanur

Toys, Bidri, Himroo, Beads, Kalamkari of Kalahasti, Artistic Wood work of Udayagiri, Nirmal Art and Metalware of Pembarti. The result of this revival has been a substantial increase in the sale of these products. The continuous efforts in this regard have found expression in the setting up of a Research and Design Centre at Hyderabad which is provided with the required personnel and equipment. Simultaneously the Department would continue to avail the services of the Regional Design Centres of the All India Handicrafts Board at Bangalore and other places.

Publicity for Handicrafts has been an important item in the Plan Programme and includes the maintenance of show cases at State Guest Houses, Tourist Bureau and Air Port at Hyderabad, the Railway Stations at Hyderabad, Vijayawada, Visakhapatnam, Kazipet, Tirupathi and Anantapur, at Pilgrim and Tourist Centres like Visakhapatnam, Tirupathi, Simhachallam, Srisailem, Yadagirigutta and Bhadrachalam. Publication of reports, printing of illustrated brochures and pamphlets, participation in exhibitions and fairs, and conducting the annual All India Handicrafts Week are among the other main items of publicity. An illustrated brochure on the Handicrafts of Andhra Pradesh for export purposes has been published recently. The advertisements are at present being handled by the Information Department along with other Government Publicity. It is recommended that a separate section be set up for Government Commercial concerns for effective and planned publicity with adequate funds.

Specialised development of individual crafts has also received due attention in recent years. A scheme for expansion of Nirmal Industry at Khairatabad which is already employing over 100 artisans with an annual production of Rs. 2.5 lakhs has been implemented. The scheme envisages the appointment of more artisans and also supervisory staff to enable the Industry to expand its production in keeping with the growing demand and to cater to the market within and outside the country. Two pilot production centres have been organised for Kalamkari at Kalahasti and leather puppets at D.C. Palli in Nellore district. Special efforts are being made to improve the Stone Carving In-

dustry at Durgi in Guntur District and two of the artisans of the place have been deputed to Mahabalipuram (Madras) for a study of the improved designs and techniques adopted in the latter centre. A similar step has been taken by the deputation of Mat weavers of Mahaboobnagar to Pattamandai in Madras State.

Several of the State's Handicrafts have a growing export potential including Crochet Lace Industry at Narsapur (Rs. 30 to 40 lakhs), Pile Carpet Industry (Rs. 10 lakhs), Seamless Quilt weaving of Kuppam (Rs. 1 lakh), Nirmal Work and Bidri Work, Ivory and Horn, Himroo and Toys (Rs. 4.00 lakhs) and perfumery (Rs. 2.00 lakhs). In order to give a fillip to the production of these crafts, an export section has been started at Hyderabad as an adjunct to the Government Handicrafts and Cottage Industries Emporium. Through this section, direct exports of the handicrafts of this State are being undertaken, besides availing the services of other established Handicrafts export organisations like the Indian Co-operative Union, New Delhi, the Indian Handicrafts and Handlooms Exports Corporation of India Ltd., New Delhi and the Crochet Lace Exporters' Association of Eluru.

The non-plan sector consists of eight Sales Emporia in the State engaged in marketing of Handicrafts. They are located at Hyderabad, Warangal, Vijayawada, Rajahmundry, Visakhapatnam, Tirupathi, Anantapur and Simhachalam. Some of the Zilla Parishads of the districts, where State-owned Emporia do not function at present, have proposed to start emporia with the collaboration of Panchayat Samithis. There has been expansion in the range of items stocked and sold particularly through the Hyderabad Emporium which has also been handling direct exports. The sales in the Emporium at Hyderabad rank it among the fifth largest Handicrafts Emporium in the country.

Problems

The efforts of the last decade have helped to build up an organisational structure for the Handicrafts of the State through which it has been possible to extend and strengthen production and marketing. The financial assistance rendered to most of the

crafts has generally helped the crafts to stabilise their working. Experience has, however, shown that with the introduction of new designs and economies effected in production costs, it would be possible to create a much larger demand for the State's Handicrafts than is evident today. In several of the crafts like Wooden Toys, Kalamkari, Metal Work and Artistic textiles, there is even today much greater demand than could be met by the current level of production. This would underline the need for a continuous study of the tastes of the people and to switch over the production to the requirements of these needs. The Research and Design Centres have an important role in providing a continuous flow of good designs and to give a lead in improving the standards of popular taste.

Secondly, any expansion programme would underline the need for more working finances for the Handicrafts Co-operatives. A good portion of the working capital loans advanced to the Handicrafts Co-operatives get repaid from year to year. Since the societies cannot rapidly build up their own resources to finance their future working because of their limited production potential and very modest margins of profit, it would be necessary to maintain a continuous flow of finances to these societies. During the current plan programme, owing to limited allocations for Handicrafts it has not been possible to meet the working capital needs of the Handicrafts Co-operatives in an adequate measure. Working capital loans constitute the most direct form of help rendered to Handicrafts Co-operatives and, therefore, it would be hard to exaggerate the importance of improved provision under loans.

Thirdly, ensuring the proper utilisation of loans is as important as providing loans to the Societies. In the past, due to lack of adequate supervision in some of the societies, particularly those located at Warangal and Karimnagar, substantial amounts have been locked up in the shape of unauthorised advances made to members. The recent sanction of special supervisory staff for Handicrafts is expected to meet this difficulty and ensure the proper utilisation of the resources placed at the disposal of the societies.

Fourthly, it is generally recognised that there is great scope

for expanding the market for the State's Handicrafts in other States and countries. Towards this end, it would be necessary to carry out market surveys, especially in other countries. For instance, Ausia Rumals of Chirala are known to have a market in Middle Eastern countries, but the uses to which these fabrics are put to in these countries are a closely guarded secret. The need for setting up suitable agencies or Emporia for the sale of Handicrafts of Andhra Pradesh in cities like Delhi, Bombay, Calcutta and Madras is also keenly felt as the local market reaches a saturation point.

CHAPTER V

Case Study I

Government Nirmal Industry, Hyderabad

Introduction

The object of this study is to analyse the growth of a leading Handicraft of Andhra Pradesh and to study its development in terms of an Industrial Organisation. At times, it may become necessary to import unconventional criteria, because Handicrafts are in a class by themselves and do not fall entirely into the usual pattern of organised industry. This will be felt to a lesser extent in the study of the Nirmal Industry as it has evolved, to a considerable extent, into a factory organisation. But this is an exception, as most Handicrafts are still very much in their infancy from an organised Industry point of view.

The case study assumes significance inasmuch as it enquires into the working of a Handicraft which has grown into a Factory. While attempting to study organisational and financial patterns, investment and cost trends, prices, marketing, Training and Labour-Management Relations the Study also devotes itself to the implications of extending a factory organisation to Handicrafts in general. The specific problem is analysed from the point of view of the Employees State Insurance Act and its burden on the Industry and the extent and nature of its functioning.

While enquiring into the Designs, Development and Marketing of Handicrafts a special reference is made to the important role that Handicrafts have played in the cultural Renaissance

of the country. Thus the subject has certain socio-cultural ramifications which should be given a proper weightage, though this may be problematic in strictly economic terms.

Origin and development

The Nirmal Industry at Hyderabad was started during 1950 and was inspired by the Toy Industry at Nirmal Village in the Adilabad district of Andhra Pradesh. The hill-locked forest bound village has been the home of the well-known Toy Industry for over four hundred years, though the village itself has had to pass through the sovereignty of the Marathas, the Moghuls and the British during this period.

The name Nirmal is derived from Nimma Naik who belonged to the Andhra Kakatiya dynasty and was, at one time, the village headman. The Toy Industry at Nirmal owes its existence to the Velmas of Warangal and was practised by a Community known as "Jeengars" who were painters.*

A brief survey of the Nirmal Village Toy Industry is relevant as the Government Nirmal Industry at Hyderabad has been greatly influenced by its techniques. In fact, a number of workers have migrated from the village and joined the Nirmal Industry at Hyderabad.

The Nirmal Village Toy Industry was started about four hundred years ago and has since grown into a leading Handicraft of Andhra Pradesh. The village "Nirmal" after which the Toy Industry is named, is situated in the Adilabad District of Andhra Pradesh. The village is situated amidst mountains, forts and forests of light wood. The wood is "Punki" and is known for its softness and strength.

The Nirmal Industry was given loans by the Government through the Indian Conference of Social Work in July 1951 amounting to Rs. 2,000 and by the Industrial Trust Fund from 1954 to 1957 amounting to Rs. 4,94,219. It also received grants during 1952 to 1957 amounting to Rs. 1,11,430. During this period the Industry was managed by a board of management con-

* As per personal interview with Master Craftsmen and Elders of the Nirmal village.

sisting of the Finance Minister (Chairman), the Secretary to Government, Industries and Commerce Department (Member), the Director of Industries and Commerce (Member), Mrs. Vellodi (Member) and Mrs. Ali Hydari (Managing Member). The Industry came under a budgetary provision of Government since 1958-59, and was progressively taken over and managed as a State Government Industry. The statistical data, as per available records, is furnished in the following pages:

TABLE 2

**Consolidated Statement of Pro forma Accounts and Balance
Sheet of Nirmal Industry—1958-59 to 1963-64**

S. No.	Particulars	1958-59	1959-60	1960-61	1961-62	1962-63	1963-64
1.	Wages	59,496	88,161	96,201	114,875	101,785	98,366
2.	Raw materials	73,020	68,826	91,974	112,490	85,640	110,844
3.	Contingencies	31,942	29,076	39,307	22,183	17,170	16,413
4.	Salaries	17,802	22,459	19,335	26,839	31,636	43,062
5.	Depreciation	1,469	1,686	1,521	792	992	
6.	E.S.I. Employees Contribution	—	—	1,980	1,749	2,642	
7.	Interest on Govt. Capital	10,184	14,898	15,780	18,866	24,020	
8.	Audit fee	800	5,917	2,029	1,839	1,902	
9.	Regional Director E.S.I. Corporation	—	—	—	18,156	—	
10.	Directorate Supervision Charges	3,000	3,000	3,000	3,000	3,000	
11.	Sales	157,931	207,366	203,860	238,938	212,174	191,755
12.	Production	184,286	219,191	209,156	282,934	257,263	232,940
13.	Loss	13,207	31,372	67,168	5,090	6,744	—
14.	Budget provision	214,000	228,000	214,000	214,000	300,000	
15.	Withdrawals from Govt. account	—	168,764	232,273	319,606	288,606	
16.	Deposited in Govt. A/c	—	89,137	190,509	173,973	160,114	
17.	Balance at the end of year	270,794	331,476	253,941	394,484	496,232	

The foregoing table reflects the statement of Proforma accounts and Balance sheets of Nirmal Industry from the year 1958-59 to 1963-64. It may be seen from the statement of expenditure that wages have been steadily rising from Rs. 59,496 in 1958-59 to Rs. 1,14,875 in 1961-62. There has been a fall in the amount of wages paid in 1962-63 to Rs. 1,01,785 and a further fall in 1963-64 to Rs. 98,366.

The expenditure on raw-materials has been fluctuating and dropped from Rs. 73,020 in 1958-59 to Rs. 68,826 in 1959-60. In 1960-61, the expenditure on raw-materials was Rs. 91,974 which rose to Rs. 1,12,490 in 1961-62 and dropped to Rs. 85,640 in 1962-63. There was again an increase in the consumption of raw-materials which rose to Rs. 1,10,844 in 1963-64.

The expenditure on contingencies had also shown a mixed trend starting with Rs. 31,942 in 1958-59, dropping to Rs. 29,076 in 1959-60, again increasing to Rs. 39,307 in 1960-61. The expenditure dropped to Rs. 22,183 in 1961-62 and further decreased to Rs. 17,170 in 1962-63, and Rs. 16,413 in 1963-64. The salaries bill however showed a progressive increase and rose from Rs. 17,802 in 1958-59 to Rs. 43,062 in 1963-64. The only exception to this trend was in the year 1961-62 when there was a downward movement. The Government capital also showed a steady rise from Rs. 10,184 in 1958-59 to Rs. 14,898 in 1959-60. It further rose to Rs. 15,780 in 1961 and the upward trend was maintained in 1961-62 when the amount was Rs. 18,866. In 1962-63, the figure further rose to Rs. 24,020. The sales showed a mixed trend and registered Rs. 157,931 in 1958-59 to Rs. 2,07,366 in 1959-60. The sales dropped to Rs. 2,03,860 in 1960-61, but again increased to Rs. 2,38,938 in 1961-62. There was again a drop in the sales to Rs. 2,12,174 in 1962-63 and a further decrease in 1963-64 amounting to Rs. 1,91,755. The production also maintained a mixed trend during the years under review and registered Rs. 1,84,286 in 1958-59 which rose to Rs. 2,19,191 in 1959-60, but dropped to Rs. 2,09,156 in 1960-61 and showed an increase in the following year valued at Rs. 2,82,934 in 1962-63. The production stood at Rs. 2,57,263 which came down to Rs. 2,32,940 in 1963-64. The industry's losses amounted to Rs. 13,207 in 1958-59 and went up

to Rs. 31,372 in 1959-60. In 1960-61, the loss reached Rs. 67,168 but dropped steeply to Rs. 5,090 in 1961-62. In the following year, the losses were Rs. 6,744. The initial budget provision was Rs. 2,14,000 in 1958-59 and rose to Rs. 2,28,000 in 1959-60. In 1960-61, the budget provision was again Rs. 2,14,000 which continued at the same figure in 1961-62. In 1962-63, the provision increased to Rs. 3 lakhs as a result of the expansion scheme. It may be seen that periodical commitments like Employees State Insurance, Provident Fund, Dearness Allowance, etc., which have to be added to the wage bill and do not make a corresponding impact on the production, account for the lack of a steady relationship between the wages bill and the raw-materials consumption. A similar trend is noticeable in regard to the salaries also, wherein posts may be created for administrative reasons depending on the amount of office work, which may be constant and sometimes increasing irrespective of the volume of production. The accumulated interest on Government capital casts a heavy burden on the Industry as it is a charge on the profits; its increase from Rs. 10,184 in 1958-59 to Rs. 24,020 in 1962-63 calls for an examination of whether the Industry could make profits with so many burdens cast on it. Other expenses like Audit Fees, Directorate supervision, Employees State Insurance contributions, etc., make profitable functioning remote.

The production has always remained higher than sales and calls for more vigorous marketing of products including the opening of new outlets in leading cities and efforts at export promotion.

The foregoing analysis indicates that it is not worthwhile for a Handicrafts unit to expand beyond a certain point as it involves burdens of Industrial Organisations, the Factories Act and legislation meant to provide social security to workers. In fact, a more satisfactory arrangement would be to keep the Handicraft units in their places of origin, which would enable members of the artisan's family to contribute to the end-product and will also reduce his cost of living in the rural areas. The discussion in regard to the operation of the Employees State Insurance vis-a-vis Absenteeism and the other burdens cast on a small unit are discussed later and will show that it is not at all

worthwhile both from the point of view of the artisan and consumer to transplant Handicrafts units in expensive, overcrowded and competitive conditions obtaining in Urban Areas.

The process of manufacture at the Government Nirmal Industry is as follows:

(i) The teak wood received in logs is cut at the Furniture Mill, Sanatnagar, to the required sizes and allowed to season naturally. Occasionally the wood is seasoned at the seasoning plant at Sanatnagar.

(ii) Articles are shaped in wood at the Carpentry workshop and finished with sand paper of different grades.

(iii) Later a coating of clear varnish is applied and thereafter a coating of primer surfacer. This has an adhesive effect for the coatings of Nitro Cellulose compound which follow. After the surface is dry, Nitro Cellulose is applied which provides for a smooth even surface. The next step consists of water papering which improves the smoothness and prepares the articles for receiving Duco paint in the required shade of colour.

(iv) The article is now ready for Art work including design and painting which is done as follows:

“The design is first drawn and traced. The traced design is perforated along the lines with a pin. Later, it is placed on the object, on which it is to be painted, and chalk powder tied in a muslin bag passed over it. This process leaves an impression of the design on the article which is ready for colours to be filled in by hand. The pinning process provides for a standardisation in the designs in addition to being a labour-saving device.

Articles are also made in “Kathil” or Silver and Gold. The silver paint is prepared by beating lead and glue on a hot stone. The liquid is applied with a brush and finished with an Agate stone which provides a striking silver effect.

If a gold finish is required, “Rogan” is sprayed on silver painting. Rogan is a herbal gold made from gums and stones and other indigenous material. The “gold” process is symbo-

lic of Nirmal technique which was practised over 400 years ago. The golden hue is permanent and non-tarnishing.

The final process in the Nirmal technique is the spraying of clear varnish which makes the colours permanent and gives a finish to the article. Nirmal products are particularly durable as the very best of raw-material goes into their making. Seasoned teak wood, and high grade duco and paints result in products which are at once attractive and enduring.

Cost Analysis—A Problem

The problem of analysing the costs of Nirmal artware has been engaging the attention of the Industry for some time. The processes in the Nirmal technique broadly are: (a) Carpentry, (b) Ducco, and (c) Nirmal art painting. The cost analysis for the industry is faced with problems which are peculiar to a Handicraft and to that extent, alien to the general principles of cost analysis.

Firstly, the problem of cutting wood to size to suit a variety of over 350 items is by itself a rather complex process. To arrive at a uniform standard of wastage in cutting wood is even more problematic. Therefore, it has been the practice in the Industry to arrive at a standard of wastage which will reflect the overall wastages in the range of cutting sizes for the 350 products that are made in the industry.

The cost element of wood as a raw-material cannot also be pinpointed because there are several other factors which come into play in the process of making the wood fit for use in the Nirmal process. The teak wood which is bought in auctions from the Government Forest Depot, Jannaram, is cut into large sizes and put through a process of natural seasoning, which extends from 18 months to 2 years. During this time the wood is exposed to the elements. From a purely cost analysis point of view it is clear that there is a bottling up of capital (the cost of the wood thus stored for natural seasoning).

The Ducco process consists of the following steps:—

- (a) Application of clear varnish by hand to act as a scaler,

- (b) Application of primer surfacer,
- (c) Application of Nitro cellulose compound (up to 6 coats),
- (d) Sand papering with '0' grade sand paper,
- (e) Spraying of primer surfacer,
- (f) Water papering with 320 grade water paper, and
- (g) Spray painting with Ducco in the required shade of colour.

If the article is to be painted in white or in a light shade of colour it is first sprayed with black and then sprayed with the required shade of colour. The foregoing processes, which are interspersed with intervals of time for drying, make a precise time and cost analysis problematic. There are several extraneous factors which come into play before an article is completed in the Ducco Section. The most important of these is the weather. The process of drying during the Ducco operation is largely dependent upon the extent of sunshine or the absence of it. The rainy season is an impossible period for the Ducco process and the winter months and cloudy days restrict the output of the Ducco Section. It is therefore not practicable to arrive at a precise time and cost analysis of operations in the Ducco Section. Artificial heating has led to unfavourable results in the long run apart from uneven finish.

Another major problem that concerns Ducco operation in the Nirmal Industry is in terms of labour. The Ducco workers are employed as casual labour because they are unskilled. The moment they pick up the technique they are offered better grades in the open market where Nirmal units are functioning in the private sector. The private sector which employs Ducco workers for short periods of time is able to offer higher wages because their operation is on a limited scale and secondly because they meet rush orders on a short term basis. The private sector is not burdened with the Factories Act, the Employees State Insurance Act, Provident Fund, Gratuity and such other social security and welfare measures which tax the Government Nirmal Industry to a considerable extent without directly contributing to

its production. The advisability of extending the above Acts to a Handicraft industry is discussed elsewhere.

The Ducco Section is divided into groups of three or four workers which are issued a variety of articles in different shapes and sizes. It is difficult to arrive at a norm in Ducco which will be uniformly applicable to different kinds and sizes of surfaces. It is not possible to issue a large number of similar articles due to the variety of demand. Moreover, since the work is done in teams, it is again difficult to fix a norm of production per head. It is also not possible to deviate from the present arrangements as there are so many processes in the Ducco Section and a single worker will be unable to complete all of them. The time lag for drying the articles will make such an operation uneconomical.

The consumption of raw-material in the Ducco Section is correlated to the experience and efficiency of the different workers in the Section. While an experienced and skilled worker may use less material and have a faster rate of production the beginner does not merely expend more raw-material but will also take a longer time to finish the article. Sometimes the article thus produced may be rejected or refinished which necessarily involves further loss of time and use of raw-material.

The foregoing factors will indicate the problem of working out the cost analysis with any degree of precision in the Ducco Section. Incidentally, this is true of other Handicrafts also, which are organised under identical conditions. The problem here crystallizes to a human issue. If there is a willingness to work and to give the best of oneself among the workers, productivity is bound to be high. But unfortunately there is a tendency to take shelter behind the many difficulties pointed out earlier which serve as effective handles for keeping production at a lower level than would otherwise be possible.

It is my experience that the worker tends to derive maximum advantage of a given situation and the pride of performances and job satisfaction that were characteristic of master-craftsmen in earlier years is a capacity that is fast declining. In the ultimate analysis creative or artistic work cannot be supervised or time schedules insisted upon without adversely effecting

quality. It has also been noticed that an emphasis on norms of production will tend to make the worker "clock conscious" and could result in sub-standard performance. The problem in a nutshell would be how to get the best of a creative craftsman in terms of economic time consumption so that the industry may remain on an even keel in spite of temperamental difficulties of artists and artisans. Though there are Workers' Education Programmes and Works Committees it is felt that these have reached the fringe of the problem only. A much greater awareness of the Workers' role in National Development and an orientation of the useful role he could play towards productivity will achieve more results. The old adage, that you can take a horse to the water but cannot make it drink, seems to apply here. The worker must have a willingness to work and work seriously and dedicatedly if fruitful results are to accrue.

The unusual factor that I have noticed is that even those workers who have recently got a promotion or a higher grade have also not made any marked deviation from the behavioural pattern indicated above. Thus it cannot be stated that an improvement in wages or a promotion will necessarily lead to higher productivity. The Workers' Education Programmes may have to be much more effective and penetrating if they are to make any impression on productivity at all.

A useful enquiry may be conducted regarding the factors which make workers give of their best to a particular job. In Germany, it is known that workers achieved a remarkably high standard of productivity which enabled West Germany to improve on the high pre-war standards of Steel production. In Japan, it is known that workers have achieved amazing technical efficiency in complex fields like Electronics and have surpassed technical achievements of Western countries including the U.S.A. What could be the secret of such admirable performances? The answer to this will probably hold the secret on how to improve the Indian worker in his productivity and efficiency.

Labour and working conditions

There has been a progressive increase in all categories of

workers in the Nirmal Industry. Due to the extremely limited use of power and machinery the Industry remains essentially labour intensive. One of the important contributions of the Industry is in regard to the providing of employment opportunities to the artists, most of whom are from traditional artisan families. The training scheme in Nirmal has also helped to provide the required know-how to many new entrants.

Working conditions

The workers are provided a congenial atmosphere and all the amenities needed.

The extension of the Employees State Insurance Act has resulted in numerous benefits to the workers. Besides getting medical aid the workers are entitled to sick leave during which period the E.S.I. pays them half their wages. The total contribution of the Industry to the E.S.I. is about Rs. 3,500 per annum. This is an expenditure which does not directly contribute to the production and it is open to enquiry as to what extent the benefits permissible under E.S.I. are genuinely made use of.

Analysis of labour force and wage structure

The labour force at the Nirmal Industry is working in the following Sections:

- (a) Carpentry Section;
- (b) Ducco Section;
- (c) Polish and Miscellaneous Section; and
- (d) Nirmal Painting Section.

The wage structure varies from piece rate workers to graded salaried workers in the income brackets of Rs. 25 to Rs. 35, Rs. 40 to Rs. 60, Rs. 66 to Rs. 90, Rs. 106 to Rs. 130, Rs. 130 to Rs. 162 and Rs. 150-180.

Carpentry Section

A feature of the Carpentry Section is that the labour force is employed on piece rates, calculated on the basis of the norms

of production, time consumed and the amount of skill required in the making of particular articles.

About 50 per cent of the workers in carpentry section are hereditary carpenters while among others one is an ex-service-man. After acquiring their basic skills the carpenters have picked up their specific type of work only after joining the industry.

Their earnings average Rs. 150 per month per head.

Ducco

The number of workers in the Ducco Section had been constant in 1959 and 1960 at 21. From 1960-61 there has been an increase of 10 over the previous year, which is about 50 per cent of the total. In 1962 there was a solitary addition to the previous year's figure.

Earnings

During the year 1959-60, 76% (16) workers were in the grade of Rs. 25-35, while it increased to 80 per cent in the year 1961 and remained almost the same in the following year.

In the grade of Rs. 40-60 the strength has remained stationary at 2, during 1959-62. Similarly, the number employed in the grade of Rs. 66-90 also remained constant at 3, during 1959-62.

Labour Force: Analysis

While the total work force during 1959-60 remained constant at 71, there was no change in the figure of employment in all the other sections during the period. In 1961, there was an upward movement in the number of workers employed in all sections except carpentry. In the Ducco Section, there was an increase of 10 per cent over the previous year figure and the total employed went up to 31. In the polish and miscellaneous section also there was an increase of 10 workers compared to the former year, while the Nirmal Section recorded an increase of 3. Thus there was an overall addition of 23 workers, totalling to 94 as compared to 71 in the former year.

During 1962, a slight downward movement in the total

number employed was discernible, bringing down the total to 89. Out of the total of 5 workers, 2 were reduced in the Nirmal Section, 4 in polish and miscellaneous section, while there was an addition of 1 in the Ducco Section.

Analysis of Emoluments

In the Carpentry Section the workers were all piece rated earning about Rs. 150 per month. In the Ducco Section, the strength remained stationary in all the grades during 1959 and 1960. The distribution for these years was as follows:

Grade (Rs.)		
25 to 35	..	16 workers
40 to 60	..	2 workers
66 to 90	..	3 workers
Total	..	21 workers

During 1961, the strength in the grade of Rs. 25-35 in the Ducco Section rose by 9, while there was an addition of 1 in the grade of Rs. 40-60, taking the total to 3 as compared to 2 in the former year.

In the grade of Rs. 66-90, there was no change while a supervisor in the grade of Rs. 106-130 was appointed. During 1962, the strength remained stationary as in 1961, while there was a solitary addition in the grade of Rs. 25-35.

In the Polish and Miscellaneous Section, the strength remained constant at 15 during 1959-60. Among these, 6 were in the grade of Rs. 25-35, 3 in the grade of Rs. 40-60, 4 in the grade of Rs. 66-90, 1 in the grade of Rs. 106-130 and 1 in the grade of Rs. 130-162.

In 1961, the total strength of the section rose by 10, the additions being in the grade of Rs. 25-35.

There was a single addition in the grade of Rs. 40-60 while the supervisor in the grade of Rs. 130-162 was accommodated in another post. During 1962, there was a slight decrease in the total strength (by 4). Of these, the strength decreased by 2

in the grade of Rs. 25-35 and another 2 in the grade of Rs. 40-60.

In the Nirmal Section as in the others, the total strength remained stationary at 29 in the years 1959-60. Of these, 5 were piece-rated, 3 were in the grade of Rs. 40-60, 14 in the grade of Rs. 66-90, 3 in the grade of Rs. 130-162 and 4 in the grade of Rs. 150-180.

There was a slight upward movement during 1961 when the total increased by 3, all of which were in the grade of Rs. 40-60. The other workers and grades remained stationary at the previous year's figures.

In a total decrease of 2, there was a decrease of 3 in the grade of Rs. 40-60, while 1 worker was added to the category of Rs. 66-90.

The wage structure in the Nirmal Industry could be classified as:

- (a) piece rate workers;
- (b) graded workers on a time scale; and
- (c) daily wage workers.

The six carpenters in the Industry are all on piece rate basis; rates have been fixed on the basis of norms of production and the time taken for finishing each article.

Except for two workers the entire Nirmal Section consists of graded workers operating on a time scale. The grades are Rs. 40-60, Rs. 60-90, Rs. 106-130, Rs. 130-180.

A number of workers in the Ducco Section are on daily wages, ranging from one rupee a day to Rs. 1.75 paise per day. A number of these who are working as in-job trainees get a rupee per day and when skilled are given higher remuneration.

Since 1961 there have been cordial labour management relations and most of the outstanding issues have been settled by negotiations between the representatives of the employees' union and the management.

The Works Committee consisting of representatives of the workers and management meets every month wherein problems

relating to discipline, working conditions, wages, promotions, increments, etc., are discussed. A High Power Committee consisting of the representatives of the Director, Industries and Commerce, the Management and the Labour also meet quarterly for deciding issues involving policy.

However, before 1961 the Industry had critical labour-management relationships which resulted in strikes and lockouts. The most important strike was in September 1958 which lasted for 13 days.

All the workers participated in the strike and stayed in the premises of the Industry during the period. Inter alia, the workers demanded : (1) higher wages; (2) taking over of the Industry by the Directorate of Industries and Commerce. As a result of this strike a Three-Man Committee consisting of representatives of the Directorate, Labour and Management, was appointed to go into the norms of production and fixed wages for different items. For the first time regular grades were introduced in the Industry.

Annual earnings of workers

The total annual earnings during 1959 for workers in the grade of Rs. 25-35 were Rs. 15,840 while the amount was Rs. 7,800 for workers in the grade of Rs. 42-60. In the income group of Rs. 66-90 the annual income of workers was Rs. 14,088 while the figure was almost Rs. 2,832 in the bracket of 106 to 130. The total annual income in the grade of Rs. 130-162 was Rs. 8,760, while the workers in the grade of Rs. 150-180 accounted for Rs. 7,920. Rs. 14,400 of the annual total income was accounted for by the carpenters whose piece rates averaged at Rs. 180.

During 1960, the figures of annual income were similar to those in 1959.

During 1961, the annual income in the bracket of Rs. 25-35 increased to Rs. 29,520, while the income in the bracket of Rs. 40-60 also increased to Rs. 10,800. There was also a noticeable upward movement in the income (Rs. 66-90) and the annual

income rose from Rs. 14,088 to Rs. 29,952. The Rs. 106-130 graded workers continued to account for Rs. 2,832 as in the previous year, while those in the grade of Rs. 130-162 slightly decreased their share from Rs. 8,760 to Rs. 7,008. The total earnings rose to Rs. 30,980. The contribution by Carpenters however remained constant at Rs. 14,400.

In 1962, there was a slight downward movement in the income totals, contributed by those in the grade of Rs. 25-35, when the total decreased from Rs. 29,520 to Rs. 28,800. There was a marked decrease in the contribution by those in the Rs. 40-60 bracket, when the total decreased from Rs. 10,800 to Rs. 6,600. In the grade of Rs. 66-90, there was practically no change in the total income earned as the figures stood stationary at Rs. 2,832. There was also no change in the income brackets of Rs. 106-130 where the figures were Rs. 7,008 while there was a slight decrease in the annual earnings in the grade of Rs. 130-162 from Rs. 13,980 to Rs. 10,020.

General Analysis

It has been noticed that there has been an upward trend in the earnings of those in the grade of Rs. 25-35. While a similar trend is also noticeable in the grade of Rs. 40-60 up to 1961; later a sudden drop in earnings was noticeable in this category. The tendency to increased earnings was more in the grade of Rs. 66-90, when the earnings increased consistently during 1960, 1961 and 1962.

In the grade of Rs. 106-130, however, there was no change in the level of income and the total annual income remained stationary at Rs. 2,832. In the grade of Rs. 130-162, there has been a slight downward trend when the total income was reduced from Rs. 8,760 in 1960 to Rs. 7,008 in 1961 and continued at that level during 1962.

In the grade of Rs. 150-180, the figures remained stationary at Rs. 7,920 during 1959 and 1960 and increased to Rs. 13,980 in 1961. This, however, came down to Rs. 10,020 in 1962.

The earnings in the carpentry section, however, were at par throughout at Rs. 14,400 per annum.

Household Survey of the Craftsmen
(Government Nirmal Industry)

The survey covered seventy-eight households consisting of eighty-five craftsmen of whom 62 were literates. (There are 3 families consisting of more than one craftsman). The household survey shows that the average size of the family is 6 and the average income is Rs. 126 per mensem whereas the expenditure of a family is Rs. 135 per mensem. Only 2 of the craftsmen are getting other income, i.e., from landed property. The survey further indicates that the majority of the craftsmen are residing in rented houses in which the housing conditions are poor. Out of 78 households surveyed, 57 are attached with bath room facility, 65 with latrine facility, 35 with water supply, and 16 are provided with electricity. The average incidence of indebtedness of a family is Rs. 30 per month.

1. Housing Facilities

(a) No. of households with bath rooms	..	57
(b) No. of households without bath rooms	..	21
(c) No. of households with latrine facility	..	65
(d) No. of households without latrine facility	..	13
(e) No. of households with water supply	..	33
(f) No. of households without water supply	..	45
(g) No. of households with electricity supply	..	16
(h) No. of households without electricity supply	..	62
2. (a) No. of families living in rented houses	..	50
(b) No. of families owning their houses	..	28
3. No. of literate workers	..	62
4. Average size of a family	..	6
5. No. of families consisting more than one craftsman	..	3
6. Average income of a family		Rs. 126
7. Average expenditure of a family		Rs. 135
8. Only two craftsmen are getting some income on landed property.		

Family Budget of a Nirmal Craftsman consisting of 5 to 6 members is as follows:

	Rs.
I. Food grains and pulses	51.50
II. Edible oils	4.00
III. Vegetables	8.25
IV. Milk and Milk products	3.62
V. Meat, Egg and Fish	6.87
VI. Sugar and gur	2.37
VII. Fruits	0.50
VIII. Tea and beverages	1.50
IX. Pan, supari, tobacco, etc.	7.00
X. Fuel and light	6.00
XI. Clothing and footwear	9.12
XII. Durable household goods	0.27
XIII. Rent	8.00
XIV. Education	3.50
XV. Medicine	1.00
XVI. Conveyance	3.00
XVII. Ceremonies	11.50
XVIII. Others	7.00
Total	135.00

All workers make complete use of the leave entitled to them and quite a large number of them work in the private sector during their leave period. They also follow a similar practice in the evenings and on holidays. There is thus a feeling that even sick leave is a kind of paid holiday which must be made full use of in earning a subsidiary income. On a number of occasions workmen who have been refused casual leave by their employers have been found to avail sick leave from the Employees State Insurance Corporation Doctors.*

Abuse of sick leave and accident leave is a common feature in industry today. The evidence adduced by the Employers representatives before the Mudaliar Commission investigating the

* V.S. Rastogi, Personnel Manager, Vazir Sultan Tobacco Co. Ltd., Hyderabad, in his paper, "Absenteeism in Industry" submitted to the Weekly Seminar on Applied Economics, Osmania University, 3 August, 1964.

working of the E.S.I. Scheme bears testimony of this.* It is noticed that sick leave has gone up from 4-8 per cent after E.S.I. was introduced in 1958.

Yet conditions remain unaltered and in its operative aspects the E.S.I. is playing the role of an abettor in the abuse of facilities offered by it at the expense of the tax payer.

It is recommended that education of workers, creation of public opinion against high absenteeism, tightening of E.S.I. machinery and closer liaison between the Company's Welfare Officer and the E.S.I. doctors should be vigorously implemented for eradicating the evil.

While it is true that the cost of living is increasing progressively and it is almost impossible to make both ends meet for a large number of people, it could certainly not be the intention of the E.S.I. that its provisions be abused in this manner. It seems desirable that a closer scrutiny be maintained over the issue of sick leave certificates and more strictness observed in disbursing the benefits of E.S.I. Otherwise Industries will have to forego the services of workers who would be merely contributing to the strengthening of competitors in the open market. The E.S.I. itself would be giving doles to workers whose health may not warrant such expenditure at public cost.

The employees of the Nirmal Industry have formed a trade union organisation under the style of the Nirmal Industries Employees Union which is affiliated to the Indian National Trade Union Congress. The workers pay a monthly subscription to the Union which has an M.L.A. as its president. The Union represents various matters concerning the workers to the management and periodic meetings of the workers' representatives and management are held in the works committee. The works committee meets once a month and discusses matters relating to production, discipline and any other issue of mutual interest.

The labour-management relations are by and large cordial and most problems are settled by negotiations.

Workers have a tendency to turn out a performance com-

**Ibid.*

mensurate with their emoluments. Thus even though more production may be possible a worker will content himself by doing that which is the bare minimum to keep him above reproach. Whenever a new design is introduced there is a tendency among workers to consume much more time under the pretext that it is new work. It is a painful fact that even the artist has become extremely mercenary in his behaviourism and the great love of labour that symbolised craftsmanship of yesteryears is conspicuous by its absence. It is next to impossible to inspire an artist worker to rise above his narrow considerations. The pride of performance and the satisfaction of having done a job well seems a myth in the context of the worker's involvement of how he can extract the most from a situation to his own advantage. Thus while the artisan/artist has acquired the psychology of the industrial worker he has yet to reach the high standards of technical efficiency or discipline that is a trait of the factory worker in large units. The man-machine relationship which devolves a heavy responsibility of care and maintenance and demands a high degree of competence and alertness are sadly lacking in the artisan/artist. Thus he has acquired the negative qualities of industrial workers without any of the concomitant, plus qualities detailed earlier. An over-anxiety to exercise rights without regard to the correlated responsibilities, which is noticeable, will be ruinous to any social or industrial fabric over a period of time. It may be of doubtful advantage to concede rights to groups of individuals who may take the rights for granted and by-pass the resultant responsibilities. The Factories Act stipulates a code of behaviour for the workers. Inter alia the code lays down that:

- (a) the workers will contribute their maximum to the productivity of the Industry,
- (b) their behaviour will be disciplined and any grievance will be put up to the management in the Works Committee;
- (c) all disputes between the workers and management will be solved through negotiation and no direct resort will be made to strikes or any unruly behaviour.

It may be relevant to consider whether the Factory Act or E.S.I. should be extended to Handicrafts units at all.

The reasons why the Factories Act and the E.S.I. Act may have to be withdrawn from the realm of Handicrafts are detailed below:

(a) Handicrafts units are not "Factories" in the real sense of the term. They are places of production where a negligible percentage of machinery is involved and most of the operations are performed by hand. Thus there is hardly any man-machine relationship and the resultant risks and hazards are minimised.

(b) The Handicraftsman works under relatively secure conditions and his production is usually leisurely, there being no problems of feeding or coordinating with a machine or plant. Thus the "Fatigue" element is also much less when compared to the factory worker.

(c) Handicraftsmen work under relaxed and congenial circumstances and they do not have to gear their faculties to a consistently high pitch as labourers, who when dealing with a machine have to guard against the slightest negligence which may cause injury or loss of limb. Thus when we concede that the conditions and atmosphere existing in a large factory is essentially different from what prevails in a Handicrafts unit, the application of the Factories Act with all its numerous ramifications may be avoided altogether.

The Employees State Insurance Act casts a substantial burden upon a Handicrafts unit which is necessarily of a small size with meagre resources. Apart from the financial burden the Employees State Insurance Act has such liberal leave and sick leave provisions that workers have a tendency of treating sick leave as a paid holiday. Since practically every worker avails of the benefits of sick leave it appears a little incongruous that all of them should fall ill every year for precisely the number of prescribed days available to them as sick leave.

It has been verified that workers avail sick leave facility (during which they receive 1/2 average pay from E.S.I.) and work in the private sector industries during this period. Not merely is the E.S.I. made to give doles to undeserving and dubi-

ously sick workers at public expense, but the industry has to contribute 50 per cent to the unfructuous expenditure. The worker on his part, who is more often than not, hale and hearty, engages himself in supplementing his income and thus supports competitors against a firm to which he should ordinarily have a sense of loyalty and attachment.

Innumerable cases can be cited when medical certificates have been obtained by workers whose health conditions were perfectly sound. A plea is made here for a more vigorous check and inspection of the application of benefits accruing from the E.S.I. Act. Any social security measure, conceived in the highest traditions of progressive societies, will defeat its purpose if placed in the hands of a working group that has yet to understand its higher responsibilities or appreciate the spirit in which the scheme has been conceived. Since Handicrafts units would not ordinarily have the problems of occupational health as obtained in large industrial complexes, it may be worthwhile to divert the benefits of E.S.I. on a priority basis to such Industries that really deserve them. Arrangements for medical attention in cases of genuine illness could be made available within the framework of existing E.S.I. Hospitals for ailing artisans.

The Employees Associations have, on more than one occasion, voiced their grievance against the way in which the benefits of the E.S.I. Act are being abused and how workers were being given doles undeservedly at the cost of the public and to the detriment of the Industry.

Training Scheme

With a view to providing trained artists for the growing demands of the Industry, a training scheme in Nirmal Art is being conducted. Trainees are selected on the basis of a competitive examination and no formal diploma is insisted upon for the entry test. The selected candidates are given a stipend in addition to the equipment for training. The period of training is divided into 4 terms of 3 months each and a regular programme of work including periodic tests and examinations is conducted.

So far two batches of 20 students each have been trained and a third batch is currently under training. Of the two earlier

should examine the imported raw-materials requirements, of Nirmal and other similar Industries, and make expeditious arrangements to provide them.

It has been accepted in principle that Handicrafts should increasingly use mechanised processes and labour-saving devices. However, it has been considered that the artistic part of a Handicraft must essentially remain a hand operation. With this in view, a number of small machines and plants have been introduced in the Nirmal Industry which are not merely time and labour saving devices but also result in a better finish of the product. The scope for increasing the number of machines particularly in the Carpentry Section remains.

The introduction of labour saving devices in the Ducco Section would form an absorbing subject for Research institutions. The problem in the Ducco Section is two-fold. The laborious and the time consuming hand operations are subjected to uncertain weather conditions resulting in poor finish and delayed production schedules. The problems to be tackled here are: (a) the evolution of a simple machine which could uniformly apply the primer surfacer; (b) the evolution of a gadget which could mechanically dry the primer-surfaced article. With minor adjustments these devices could also be used for drying 'Ducoed', 'gold' and 'cleared' articles.

The spraying operations, particularly with Ducco paints, has proved to be injurious to the health of the painter. The fumes of Ducco paint are harmful to the lungs. It is also found that there is some waste when the fumes spread beyond the article and pollute the atmosphere. Here is another problem that could be taken up by a Research Institute. The device will have to ensure three main conditions:

1. The spraying of the Ducco film should be uniform on the article without manipulation of the article by hand;
2. The fumes of Ducco must be kept away from the spray painter to avoid contact; and
3. The wastage of Ducco and its entry into the atmosphere should be eliminated to ensure economy and purity of atmosphere.

Cost Analysis

The difficulties in introducing scientific costing have been explained earlier in the chapter. Apart from the fact that Nirmal Processes have to depend on extraneous uncontrollable factors like weather conditions, the continuous availability of skilled craftsmen particularly in the Ducco Section is another important issue. In the foregoing conditions it has been problematic to arrive at any satisfactory cost analysis in its operative aspect. However, the introduction of mechanised equipment referred to earlier by way of appliers of primer surfacers and gadget for drying products would go a long way in standardising the consumption of time, material, and hence costs.

Labour

The studies in labour productivity and the contribution of wages to total costs has clearly revealed that periodic booms and depressions occur at intervals of about two years. A period of boom is invariably followed by a period of depression as the effects of increased wages wear off and the Employees Union prepares for another "Struggle for increased Wages". As their efforts meet success, partially or totally, there is a period of boom followed by an increase in production, which takes about two years to wear off again. Each such struggle involves go-slow methods, wastage of raw-materials, which have an adverse effect on the economics of the industry. To obviate this situation it is recommended that incentives should be tied-in with production. A risk, however, is that an incentive to production, particularly in the Handicraft Sector, tends to speed up the rate of performance, which could result in sub-standard production. With the strict enforcement of minimum standards, in production, it would be possible to introduce an incentive tied in with productivity. However, the acceptance of this principle by Government remains to be notified which when done would go a long way in off-setting booms and depressions in productivity.

Marketing

The problems of marketing Nirmal are unique as the product is more expensive than many handicrafts. Thus, I have

found considerable reticence on the part of shops, dealers and Emporia—all over the country—to buy Nirmal outright for sale. They have invariably wanted consignment terms to avoid locking up of their capital. Though consignment facilities are permitted to leading emporia like Central Cottage Industries Emporium, New Delhi and Victoria Technical Institute, Madras, a policy decision has yet to be taken on the subject. Terms and conditions for consignment sales have also not been finalised and this has contributed to restricted growth of Nirmal Industry markets. Though Marketing Committees of the Board have recommended outright purchases, this suggestion has not been implemented in regard to certain expensive crafts including Nirmalware. The private sector in Nirmal is prepared to offer consignment facilities and hence they are preferred. The Private Sector also offers an on-the-spot selection to leading Emporia all over the country and even Government Emporia have been patronising them in spite of mediocre quality. A Government servant's tour, outside the State, involves permission by Government which may take several months to issue. This is one more instance where Government procedures hinder effective commercial functioning.

Nirmal Industry has had no benefit of market research surveys and reactions on its products exhibited at inter-national fairs. The samples of Nirmal ware displayed at sample show-rooms run by the Handicrafts-Handlooms Export Corporation have not resulted in any comments, much less enquiries from interested parties. A similar performance is available in regard to the trade centre of the Government of India in New York.* Selections for World Fairs also leave much to be desired. An immediate need exists for the setting up of State Government Emporia in Bombay, Calcutta, Madras and Delhi. This will be a sure way of ensuring wider markets.

Designs and Technology

Though a network of Design Centres and Research organisations are addressing themselves to the problem of reviving tradi-

* Indian Handicrafts—Existing Organisation and Marketing Facilities in the United States of America—All India Handicrafts Board.

tional Indian motifs and designs the fact that remains is that there is limited coordination between the Research and Design Centres and production units, artisans and Mastercraftsmen. The Design Extension Movement is almost as important as the Design Movement itself, because without their translation in terms of Handicrafts, the Designs evolved at various centres remain on paper only. Similarly, whenever small machines or labour saving devices are evolved, a vigorous drive must be made to introduce the improvement in technology in the mechanics of actual operation. There is, I feel, a need for design extension sections in Design Centres which will translate designs into workable propositions, for the many illiterate craftsmen that function in many parts of the country.

The design centres must keep in live contact with market research institutions and sales emporia in India and abroad, so that a consensus of current consumer preferences could be drawn from and implemented.

APPENDIX TO CHAPTER V

GRAPH I

Fluctuations in proportions of important items of cost

This figure reflects the fluctuations in proportions of all the important items of cost. Thus if the raw-material band is of unit width it shows that the proportion of raw-material cost to total cost is constant. It may be noted that the cost reflected is not the absolute raw-material cost, but the relative cost which will be more or less constant in the case as this.

Graph I in the time series reflects the proportions of normal profits (imputed), interest, raw-materials, wages, salaries and other items. These items constitute the cost broken up in terms of total supplementary cost and total prime cost.

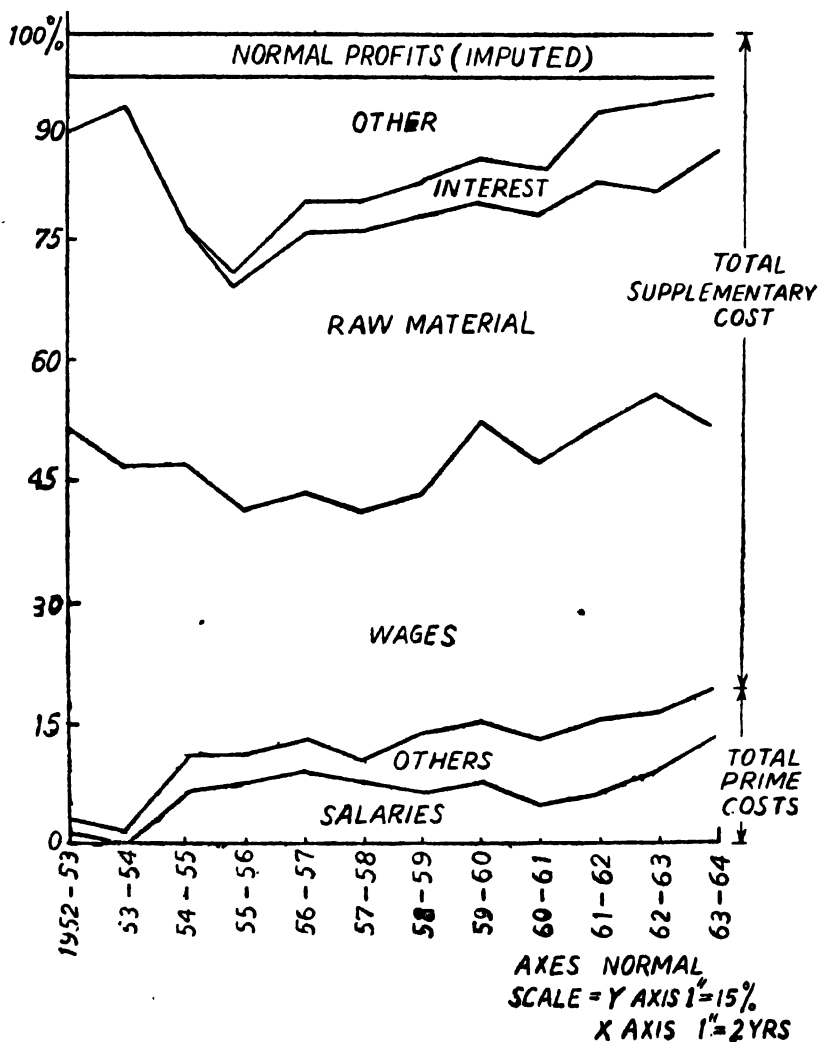
It may be noticed that the imputed normal profits are constant as a standard portion of total cost if imputed as normal profit.

The other expenditure under total supplementary costs includes electricity bills, postage and telegrams charges, packing and forwarding charges and miscellaneous expenditure. The band of these items shows a small beginning in 1952-53 gradually decreasing during 1953-54 and suddenly increasing in 1955-56. The expenditure reflects the exploratory work done in sales promotion and market research, and the establishment of contacts in India and abroad. The increased volume of output accounted for increased trade discounts permissible to parties which has also been reflected in the band. Another reason for the increase in this band during 1955-56 is the decrease in costs towards raw-materials and wages.

The interest during the year 1952-53 and 1953-54 has been nil because the Industrial Fund provided interest-free financial assistance by way of grants and loans. From 1954-55, the investment in the Industry was treated as Government capital and an interest at 4 per cent was provided for in the Balance Sheets. The interest on capital steadily increased and now stands at 5.5

per cent and hence it may be seen that the interest band has been steadily widening.

GRAPH I GOVT. NORMAL INDUSTRY



The raw-material band is widest in the initial stages as the industry passed through phases of research and experimentation in raw-materials and manufacturing processes. For similar

reasons the wages band also shows a corresponding size as considerable raw-material and man-hours were spent in research and experimentation. There has been a gradual decrease in the use of raw-material as the workers attained skill through practice and there were economies in consumption. During 1955-56 the raw-material band shrunk because the expenditure on wages and other items including contingencies increased. Salaries also increased during that period. The raw-material band has been steady in the following years except during the year 1959-60.

The wages band after a broad start in 1952-53 has progressively narrowed till 1958-59. As mentioned earlier, the size of the wages band at its inception has been rather large because of developmental expenditure in connection with research and experimentation. The wages band again broadened during 1959-60 as there was some addition to the work force (casual labour) during that year. The band remained more or less steady in the subsequent years. During 1963-64, the wages band narrowed down due to increase in cost of raw-material.

Other expenditure under the total prime cost has been gradually increasing and reached its highest during 1959-60 and 1960-61. After these years, there is again a steady decrease. This band reflects the expenditure on rent, phone bills, etc.

Salaries actually start in 1953-54 and show a steady increase till 1956-57. Later, till 1960-61, there is a gradual decline with a more definite increase from that year. The higher expenditure towards salaries are due to the sanction of posts under the Expansion Scheme, and to the revision of grades in 1961-62.

GRAPH II

Time Series

Graph showing the trend of:

Scale

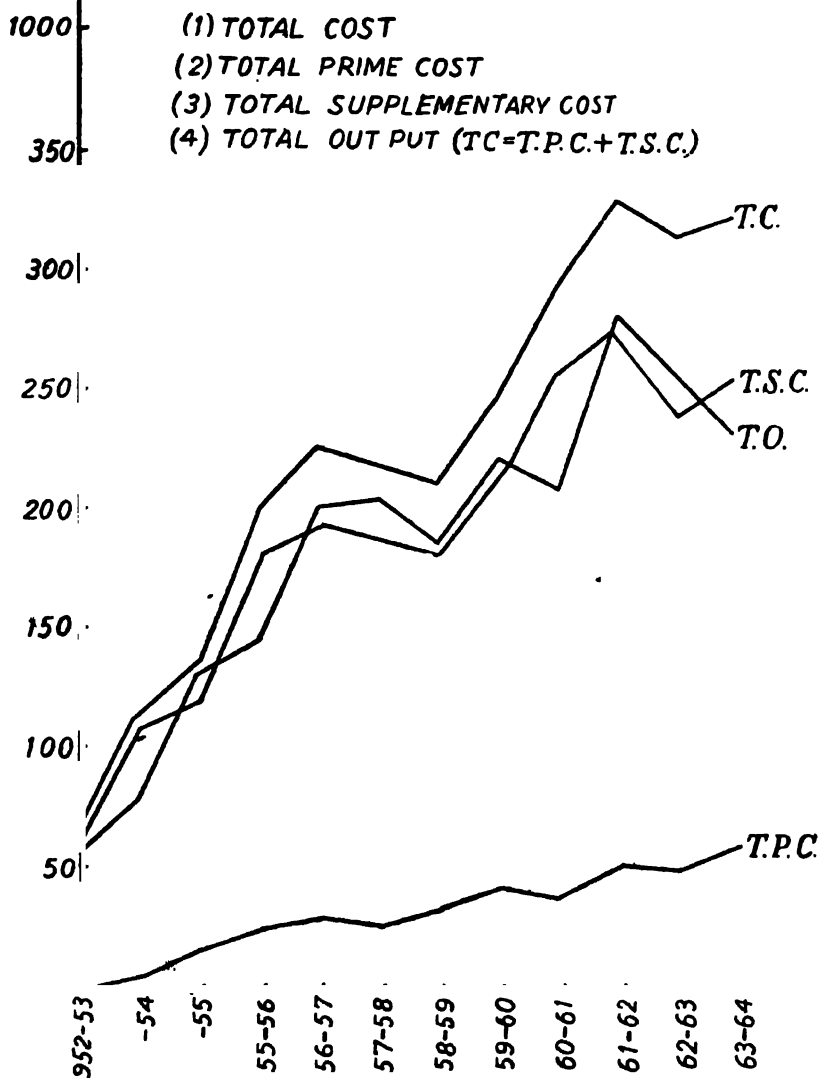
X axis 1" = 2 years

X axis 1" = 50,000 Rs.

- (i) Total cost
- (ii) Total Prime cost
- (iii) Total supplementary cost
- (iv) Total output

$$T.C. = T.P.C. + T.S.C.$$

The general trend of output, total cost and total supplementary cost follow the expected pattern up to 1956-57. All of them increase in an identical pattern showing that while the output is increasing, total cost and total supplementary cost is

GRAPH II GOVT. NIRMAL INDUSTRY**SHOWING THE
TREND OF**

SCALE X AXIS = 1" = 2 YRS.
Y AXIS = 1" = 50,000 Rs.

also increasing proportionately. This should have been the trend throughout, but for the fact that during the years 1956-57, 1958-59, 1959-60 and 1961-62 there are important points of inflexion in the course of output. The most important fact is that while during the years 1956-57 and 1961-62 the total cost and total supplementary cost also followed the path of output, in the remaining years there is a marked contradiction between the courses of total cost and total supplementary cost on the one hand and output on the other. During the year 1957-58 there were strikes and labour unrest involving loss of about 12 to 15 thousand man-hours, which led to a dip in the turnover. In the year 1960-61 the apparent contradiction between the course of turnover and total cost could be explained by the fact that there was again labour unrest leading to go-slow methods resorted to by the workers. Because of this the output decreased but without any consequential decrease in total cost. In fact, because of such an attitude on the part of the workers the total cost increased more than proportionately as is indicated by its slope at this point. The output went down rather markedly after 1961-62. On the other hand the total cost increased during this period, firstly because of the scarcity of raw-material (which later led to the utilisation of inferior but high priced substitutes), and secondly because the prices increased due to scarcities caused by the declaration of the National Emergency. This was particularly so in the case of imported raw-materials.

GRAPH III

Bar diagram showing : 1. Annual turn-over and
2. Annual total cost.

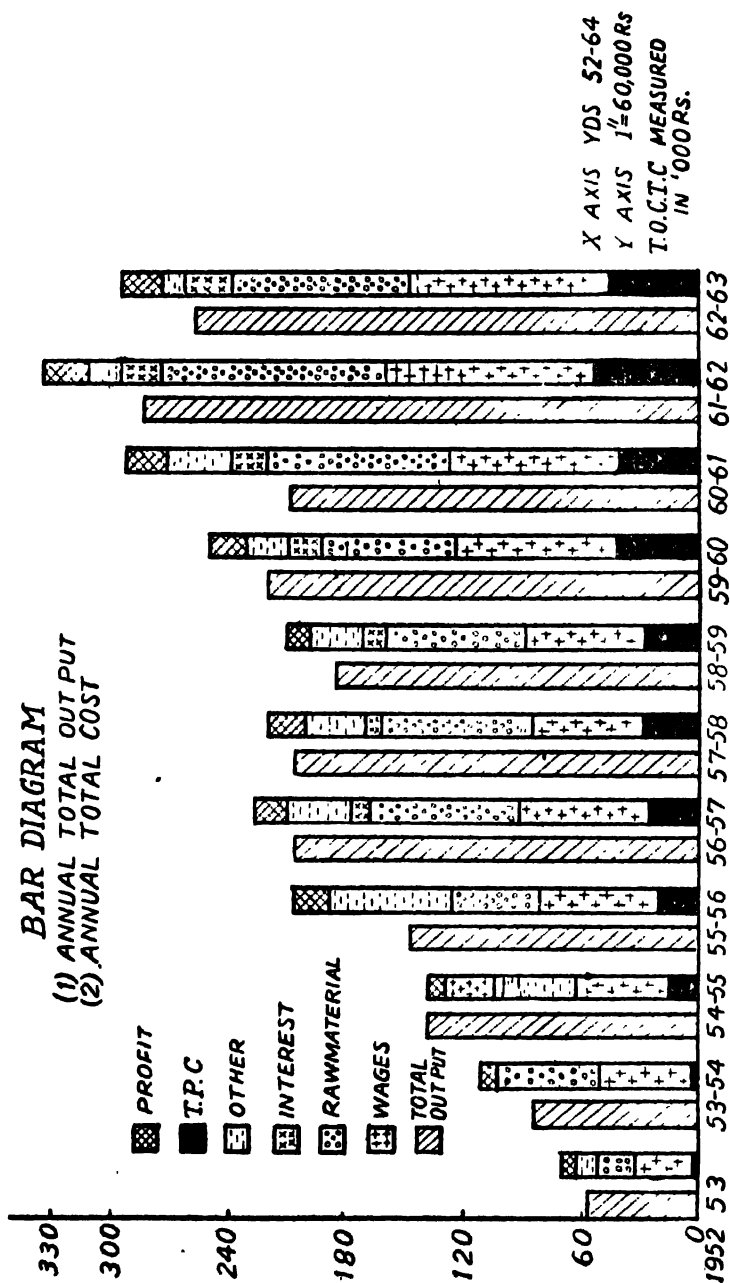
X axis : Years 1952-64

Y axis : Total output and } 1" = 60,000 Rs. measured in '000 Rs.
Total cost

Graph III is a bar diagram showing the annual total output, annual total cost and its composition. A striking feature of the bar diagram is that the costs have always been higher than the total output. This situation calls for a re-examination of cost analysis and expenditure in terms of over-heads and contingencies.

A factor to be considered in this regard is the marketability of the product at particular prices. Thus a mean has to be struck between the marketability of the product and the price it can bear for this operation. A feature of the bar diagram is the almost identical cost under the raw-materials and wages heads.

GRAPH III GOVT. NIRMAL INDUSTRY



As among other Handicrafts it may be noticed that there are no economies of large-scale production and the costs have correspondingly increased with additional output.

During 1961-62 while the output registered its highest point expenditure also reached the highest and hence the co-relation between the output and expenditure has been maintained steadily. A conclusion from this phenomenon is that costs and output are closely and directly co-related and there has been negligible expenditure on capital investment or sinking of funds towards equipment and machinery, the values of which could be realised over a period of time.

CHAPTER VI

Case Study 2

Bidriware

Origin and development

Bidri, as the name denotes, originated in Bidar, now a town in the Mysore State. Before the reorganisation of States, in 1956, Bidar, with its tombs and vast imposing fort, was a part of Hyderabad State. Stimulated by the aesthetic-art conscious Bahmani kings, Bidriware made much headway and in time evolved into a leading Handicraft. Historic evidence in regard to the origin of Bidri is scattered and only glimpses of its chequered career are available. It is said that over 500 years ago Abdullah Bin Khaizer migrated to Bijapur and was the first known artisan in the Bidri Medium. "Historically", says Mr. E.E. Speight, "the most we can say is that the last years of the Bahmani dynasty, that is the first decades of the 16th century, may have seen the first Bidri work."

The secret of preparing Bidriware was conceived by a goldsmith, who due to his service, won the confidence of Abdullah Bin Khaizer. The craft thus became a part of goldsmithy and gradually spread to a number of goldsmith families. Among the patrons of Bidri were Ahmed Shah Bahmani, the son of Allaudin the second, who had an intense interest in the craft. The former Nizam of Hyderabad, H.H. Mir Mahaboob Ali, Asaf Jah the VI, was also an enthusiastic admirer and the craft was nurtured under royal patronage.

It is generally believed that Bidriware is not a new art which came to be developed in Bidar for the first time. This is akin

to the ancient art of inlaying gold and silver in copper and steel, which was practised in Persia and Arabia. This again suggests that it migrated to India from these countries, but took an altogether different form to become the speciality of Bidar.¹

When Ahmed Shah Bahmani transferred his capital from Gulberga to Bidar, he invited his craftsmen to the capital and bestowed royal patronage. Thus it appears that this craft dates back to 500 years to the Bahmani and Baridi dynasties under whose patronage it flourished and reached its great perfection and beauty. Bidri has thus a common ancestry with the older art practised in Arabia and Persia of inlaying gold and silver in steel or copper. It differs from others in the basic material which in place of steel or copper is an alloy of zinc with small proportions of other non-ferrous metals of a dull leaden colour. This is the innovation which is peculiar to Bidri and hence the name Bidriware.²

Mr. Abdy Collins, former Director-General of Commerce and Industries, H.E.H. the Nizam's Government, Hyderabad, has described the process of making Bidriware. The material employed is a combination of zinc and copper in the proportion of 16:1. The object of the small mixture of copper is to make the zinc take a better polish. The first process is to cast the articles to be made in the rough. This is done for the heavier objects by covering the matrix with a mixture of wax and Rosin. The latter is required to harden the wax. Over this, a further covering of red clay, supported by stops is placed and the wax is then melted and the molten metal poured in. Smaller objects are built up somewhat differently: when the rough cast article is ready, if round, is polished on a lathe. Next the design is drawn and cut in with a fine pointed instrument. Pure silver, in sheets or wires, is then hammered into the design and the article is filed and polished. It is then cleaned with a certain earth, found in Bidar, probably village site earth, containing salt petre. This account agrees in the main with the more detailed one of

1. S.S. Mensinkai—*Survey of Handicrafts in eight districts of Mysore State*, Karnatak University, Dharwar, 1961. p. 1.

2. *Ibid.*, p. 2.

Mr. T.N. Mukherjee, in the journal of Indian Art, April 1885, which incorporates the researches of Captain Newhold and Dr. Buchana Hamilton. The Royal Austrian Commercial Museum, Vienna, published an excellent illustrated account of Bidri in their collection of 1885. The publication also included pictures of Turkish, Arabian, Persian and Central Asian Metalwares.

Bidriware has three types of workmanship:

1. "Zarnishan" or embossed work,
2. "Tahnishan" or overlay of sheet silver,
3. "Tarkashi" or inlaying of wire.

Demascening in silver is called Bidriware. The name having been derived from Bidar in Hyderabad (now Mysore State) whose Mohammedan craftsmen decorate Hukka stands and plates in their own most inimitable style of work. The patterns employed are in imitation of the poppy plant—a design of great artistic merit. The prevailing custom amongst the Mohammedans in Hyderabad of presenting a complete set of Bidriware to the bridegroom at the time of marriage is responsible for its flourishing trade conditions even today. "No dowry is considered complete among the better class of Mohammedans unless a complete set of Bidriware from bed legs to a spittoon is included. The high price often renders it necessary for the father of a family to begin his collection years before his daughter is marriageable. Other places of Bidri manufacture are: Lucknow, Purniah, and Murshidabad."

According to Mr. Speight, "The original use of Bidriware was in connection with the smoking of Huqqa, the offering of pan and supari, water drinking and ablutions; little boxes known as "Dibia" or "Illaichidan" which were round, rectangular and oval, were also in vogue. Other well-known traditional pieces were the Jam and Abkari, Ugaldan, Surahi, Aftaba and Sailabchi.

Popular among designs is the lotus motif which, according to Sir Flinders Petrie, is so widespread that some have seen

in it, the source of all ornament. This motif has found its way in Pandans, Surahi and other articles.

Gold inlay work is now rare, but was, at one time, as popular as silver. At present, gold inlay is combined with silver inlay work and thus a colourful Bidri creation is possible.

In recent years, Bidriware has shown remarkable adaptability as articles of every day use have been made in Bidri. Buttons and Brooches form a part of the exquisite jewellery now being produced in Bidri. Boxes have adapted themselves for cigars, and cigarettes, trinkets and jewellery and Surahis have evolved into fascinating lamp bases and flower vases. A recent innovation in Bidri, with which the author of this thesis was intimately associated, is the introduction of figurines. For the first time in 1960-61, the Bidri medium was used to represent such well-known figurines as Mohini, Buddha and Nataraj. An entry for the National Design Competition depicting Mohini in Bidriware was adjudged the best entry and a new dimension was created in the evolution and growth of Bidriware.

The raw-materials used in the making of Bidriware are zinc, copper, pure silver and small quantities of salt petre, copper sulphate and sal. ammoniac.

The equipment necessary are: moulds, crucibles for melting the metals, pointed steel pens for engraving the design, hammers, chisels, files, etc. At the Common Facility Centre, provided at Hyderabad for the Mumtaz Bidri Works and the Gulistan Bidri Works Co-operative Societies, power-driven lathes and wheels have been provided for shaping and finishing articles. With this equipment is combined the artistic skill and endeavour of the craftsmen.

The traditional designing of Handicrafts is on account of the social and psychological background, a complex amalgam of the influence of religious whim and vanity of rulers and lords and the elemental experience, aesthetic genius and technical competence of the craftsmen. As one looks upon the traditional craft products of this country, one comes across patterns of awe inspiring beauty, expressing vision and form and feeling which has few parallels in the art treasures of the world. Here one can have

a glimpse of the entry of the Indian people in all its infinite moods.⁴

Organisation

For the purpose of analysing the growth of Bidriware an attempt is being made to compare the organisation of Bidriware as it exists at Bidar, now a part of Mysore State, and in its new home at Hyderabad, Andhra Pradesh. In Bidar, there were 19 establishments of which 11 were independent, 2 were partnerships and 6 were co-operatives.⁵

An independent organisation normally means a proprietary form of organisation, wherein the entrepreneur is free to frame his own policies of production and distribution and who normally supplies his own capital, and may be in a position to borrow freely to some extent on reasonable terms.

At Bidar the establishments are found to be formally independent, in actuality they are household type of establishments where the head of the family secures his supplies of raw-materials from the local dealer on credit basis and pays the money after the sale of his ware. It amounts to borrowing from the trader, who obviously includes an element of interest in the prices charged by him for the raw-materials supplied in addition to his trade margin. Sometimes the worker is compelled to sell his ware to the same trader or to some other middleman if he is not in a position to undertake the marketing of his products on his own. This is found to be the normal practice in the case of independent household type of establishments in the Bidri craft. Thus on two accounts the worker is at a disadvantage; firstly, he is unable to secure regular supplies of his raw-materials at reasonable rates due to lack of resources. As a result, he is not able to accumulate stocks with a view to marketing them at the proper time, when he would be in a position to obtain reasonable prices for his product. In other words, he does not possess

4. Survey of Indian Handicrafts—Report on the Marketing of Handicrafts sponsored by the All India Handicrafts Board, 1955, p. 8.

5. S.S. Mensinkai—*A Survey of Handicrafts in eight districts of the Mysore State*, Karnatak University, Dharwar, p. 2.

the "holding power". Secondly, he does not possess necessary funds for financing and marketing. This includes storage, costs, and costs involved in the establishment of business contacts, with households, and retailers or customers at distant places. At best he can sell his wares to the middlemen or customers at neighbouring big towns or cities.⁶

The six establishments which were reported as co-operative producers societies are by far the most important ones. It is agreed that co-operation provides an adequate and suitable organisation for the small craftsmen who otherwise will be at a great disadvantage in producing and marketing their articles. It ensures democracy in production and equality in distribution. Unfortunately, in many fields of co-operation in India, a co-operative society is a voluntary organisation, only in name. Even in a society originally formed by workers coming together, it soon degenerates, in most cases, into an organisation for the benefit of those who manage to exercise control over the organisation. The entry of rank outsiders or vested interests, who have some resources of their own to invest and who provide the leadership has resulted, at least in some cases, in converting the co-operative organisation into an engine of tyranny or a dictatorship of the extreme type. No better example of this state of affairs could be found than in the case of the Bidri producers co-operative societies at Bidar. Formerly, these so-called co-operatives were independent factory type of organisations, where the partners, or owners, used to provide their own or borrowed funds and employed hired craftsmen. The erstwhile Hyderabad Government having realised the poor conditions of the craftsmen engaged in these crafts, came forward to provide certain facilities on the condition that they organise themselves into co-operatives. The owners of the factories lost no time in utilising this opportunity and registered their "factories" under the Co-operative Act. Everything remained the same as before except the change in name. The same workers continued to work for them unmindful of the change in name and its significance to them. Some of them were carefully chosen and were made "members" of the

6. *Ibid.*, pp. 23.

society perhaps even without knowledge. The owner of the factory designated himself as the President or Chairman of the society and nominated his own Secretary and Treasurer. The factories which thus came up were known as co-operative producer societies in the eyes of the Government. The Managing Committee likewise was composed of persons selected by the Chairman. These and similar devices were effected to hoodwink the Government, only to take advantage of the facilities offered by it. These were some of the facts which were brought to light in the course of investigation, into the working of these producers co-operatives. The same view regarding form and work of these co-operatives has been expressed by a survey unit of the Indian Co-operative Union. The report says, "In Bidar" four co-operatives with about 50 members have been organised in the famous Bidri Craft but they can hardly be called co-operatives. They are private middlemen's units merely converted into co-operatives against the assurance of financial assistance. The middlemen have now become Presidents. Having provided all the capital, there are no managing committees, the Presidents saw "no need" for them; since all the money had been invested by them and nobody has any information about the nature of co-operative.⁷ This is the apt description of the societies even today. It is further found that the Presidents of these societies are absentee Presidents like absentee landlords. Most of the time they stay in Hyderabad where it appears they are engaged in similar activities. The societies at Bidar are managed by the Managers from Hyderabad while they pay visits to Bidar occasionally.⁸

At Hyderabad, Andhra Pradesh, two co-operative societies were formed; these were the Mumtaz Bidri Works, which was registered on 13th October 1958 under Reg. No. T.A. 24 with 14 craftsmen and the Gullistan Bidri Works which was registered on 13th October 1958 with Reg. No. T.A. 25 with 12 craftsmen including 2 parda ladies. The craftsmen/co-operators in both these societies were from Bidar and the promoters were

7. *Report on the Marketing of Handicrafts*, Chapter IV, p. 3.

8. S.S. Mēnsinkai—*A Survey of Handicrafts in eight districts of the Mysore State*, Karnatak University, Dharwar, p. 5.

former karkhanedars at Bidar. Shri Mensinkai's analysis of individual karkhanas being converted into co-operative societies for the purpose of utilising Government funds and assistance holds good in the case of the Hyderabad societies also. Besides the co-operative societies there are 5 Bidri Centres functioning in the private sector.

These are (1) the Bharat Bidri Works Centre, (2) Ancees Bidri Works Centre, (3) Basheer Bidri Works Centre, (4) Famous Bidri Works Centre, and (5) Yakhoob Brothers Bidri Works Centre.

A scheme for providing a Common Facility Centre for Bidri Workers on co-operative lines was introduced with effect from 31st August 1957. Under the scheme, assistance in terms of grants and loans as also managerial assistance was provided as follows:

During 1958-59 grants worth Rs. 28,100 and loans worth Rs. 8,000 were given to the Common Facility Centre totalling Rs. 36,100. During 1959-60, a grant of Rs. 8,100 was provided while no loans were made during that year. During 1960-61, grants worth Rs. 8,100 and loans worth Rs. 6,000 totalling to Rs. 14,100 were disbursed to the Common Facility Centre for Bidri workers. During 1961-62, a grant of Rs. 3,400 was made.

A work shed costing Rs. 10,000 and equipment valued at Rs. 10,000 were also provided in addition to managerial assistance for production and sales. The production and sales figures reveal that there was an impressive rise from Rs. 35,000 in the first year of production to Rs. 60,283 during the following year (1959-60). During 1960-61, however, there was a sudden drop in production which came down to Rs. 28,449. But the set back was soon made up and the figures for the following year showed an all time high taking the production to Rs. 68,664. Sales also showed a remarkable improvement during the second year as compared to the first but again dropped in the third year.

A comparison of the production per worker in the co-operative sector and in the leading private sector Bidri Centre reveals

that while a worker in the co-operative sector produces Bidri valued at Rs. 1,904.16 per annum his counterpart in the private sector produces Bidri valued at Rs. 2,750.

Unfortunately, it has not been possible to analyse the earnings of workers with Yakhoob Brothers which has shown a higher productivity per worker per annum as the firm has declined to make such data available. However, an analysis of the emoluments of workers in private sector firms reveals that they correspond favourably with those in the co-operative sector. As a matter of fact the skilled workers in the private sector are earning more than those in the co-operative sector.

Gullistan Bidri Works

This is the second co-operative in the Industry and was registered on 13th October 1958 under Reg. No. T.A. 25, with 12 craftsmen including 2 parda ladies, working at their homes.

The Centre produces articles valued at Rs. 40,000 per annum on an average during the last three years, and most of the articles are marketed through the Government Handicrafts and Cottage Industries Emporium, Hyderabad. The Centre also executes orders of the All-India Handicrafts Board and the Central Cottage Industries Emporium, New Delhi.

Yakhoob Brothers Bidri Works Centre

Yakhoob Brothers Bidri Works Centre situated at Mallepalli, Hyderabad, is the leading Bidri Centre in the private sector and is one of the best-managed. The unit engages 12 workers and produces articles worth Rs. 36,000 per annum.

Since the Co-operative Sector in Bidri has been used as a handle by private Karkhanadars or proprietary concerns, as a means of acquiring financial assistance from Government and not in any spirit of Co-operation, it seems necessary to look into other forms of organisation, wherein Handicrafts could make some headway.

The case study of this society shows how the very purpose of Co-operative Organisation may be defeated if it is imposed on people who are psychologically not prepared for it.

Household survey

The Household Survey of the craftsmen reveals that most of them are not having proper housing facilities. Many of them are living in rented rooms in which bathing, water, electricity, and other conveniences are not available. Their economic condition also seems to be very poor, particularly when the earnings are not able to provide for bare necessities.

Until such time as "psychological preparedness" is obtained for sound co-operative institutions, ways and means may have to be devised for providing easy financial assistance to private parties. In most cases it is found that it is the supplier of raw-materials or other middleman who provides such funds, since they have a stake in the business. Once again it has to be noted that the funds supplied by this agency were available at a high cost as shown by the rates of interest which stood at 24 per cent while the Government charged only $3\frac{1}{2}$ per cent, but provided just 20 per cent of the total advance and that too mainly to the producers co-operatives. Thus it is clear that both from the points of view of loans and advances, the smaller establishments of the household type were able to secure insufficient accommodation and that too at a high cost.

Financial assistance

More than 50 per cent of the long term financial accommodation was provided by Government and over 41 per cent of the loans were supplied by traders or money lenders and a small percentage of funds were supplied partly by friends and relatives and partly by the establishments themselves by way of share capital in the case of co-operative producers societies and by borrowings in the case of others. Thus, the traders or moneylenders continue to remain, by far, the most important source of finance next only to Government. However, it is clear that there is a significant difference in the rates of interest charged by the two agencies. The former agency charged 24% while the latter charged only $3\frac{1}{2}$ per cent per annum. It is to be noted that neither co-operative banks nor the scheduled banks and insurance companies supplied funds even to the bigger so-called producers co-operative societies. What is noteworthy is that more than 41 per

cent of the total loans supplied were available at a high cost and this is the major or the only source of finance insofar as the smaller household type of establishments are concerned, since the funds from Government source are available only to the producers co-operatives. Thus from the point of view of the ability to raise long term funds, the small establishments were found to be at a great disadvantage.⁹

It is thus clear that the smaller establishments who need finance most are also at the greatest disadvantage, in terms of getting financial assistance at reasonable terms. It will be well worth the while for Government, the State Bank of India, the Reserve Bank and other commercial and co-operative banks or Central and State Financing Agencies to consider practical ways and means by which easy financial assistance may be made available for smaller establishments. Since the co-operatives are not yet psychologically prepared to function in the best co-operative traditions and consider the Government as being responsible to market their produce, it may be worthwhile to explore avenues by which facilities made available to co-operatives are also made available to small enterprises of a private nature. It is under these conditions, when identical facilities are available to both co-operative and non-co-operative centres, will the genuineness of forming co-operatives be gauged in the overall context of the evolution of the co-operative movement, in our country. It will be pointless to enforce co-operation on people who may at best look upon the arrangements as one of convenience and not with any regard to the philosophy or principles involved therein.

The analysis of cost for six selected Bidri items revealed that the cost of Silver accounts for about 20 per cent of the total cost of the article. Another 20 per cent is accounted for as commission allowed to the Sales Emporium, and as profit to the Co-operative Society. Designing and inlaying account for about 12 per cent of the cost. Other items include: zinc, copper, coal, moulding, filing, buffing and colouring which share almost equally the remaining 48 per cent of the cost.

9. S.S. Mensinkai, *A Survey of Handicrafts in eight districts of the Mysore State*, Karnatak University, Dharwar, 1961, p. 7.

TABLE 4

**Consolidated Statement of Pro forma Accounts and Balance-Sheet
Gulistan Bidri Works Co-operative Society, Hyderabad**

<i>Sl. No.</i>	<i>Particulars</i>	<i>1959-60</i>	<i>1960-61</i>	<i>1961-62</i>	<i>1962-63</i>	
1.	Wages	11,018.70	10,668.61	13,682.81	12,850.82	
2.	Raw materials	7,526.75	12,853.31	11,426.10	20,271.55	1961-2
3.	Contingencies	150.00	147.47	—	38.50	1962-3
4.	Salaries	3,554.31	1,996.00	1,200.00	1,200.00	is not audited
5.	Depreciation	1,413.70	463.90	440.25	451.15	
6.	Interest on Govt. capital	—	—	348.68	187.36	
7.	Audit fees	—	—	—	—	
		23,663.47	26,129.29	27,077.84	34,999.38	
1.	Sales	27,673.86	25,643.27	28,829.53	39,591.52	
2.	Production	31,529.19	39,465.27	72,745.03	45,761.63	
3.	Profit	264.17	—	280.00	715.19	
4.	Loss	—	954.27	—	—	
5.	Balance at the end of the year	1,492.49	620.39	149.62	755.96	
		60,959.71	66,683.20	72,004.18	86,824.30	

It may be seen that the Industry is Labour Intensive in character as wages accounted for nearly 50 per cent of the total expenditure during 1959-60 and 1961-62. During 1960-61, the wages bill was about 40 per cent and a little less in 1962-63.

Raw-material is among other important costs of the Industry and, during 1959-60, accounted for nearly 33 per cent of the total cost, while in 1960-61 it increased to over 45 per cent. Again the raw-material bill dropped to about 40 per cent in 1961-62. It shot up to nearly 60 per cent of the total cost which also rose impressively during 1962-63.

The sales of the Gulistan Bidri Works Co-operative Society have steadily increased from Rs. 27,674 to Rs. 39,592 in 1962-63. The only exception to this trend was in the year 1960-61 when the sales dropped slightly.

The production has also shown a rising trend and has risen

from Rs. 31,529 in 1959-60 to Rs. 45,762 in 1962-63 with an all time record of Rs. 72,745 in 1961-62. Thus it may be seen that the society has been functioning on progressive lines.

Table No. 4 below reflects the consolidated statement of pro forma accounts of Mumtaz Bidri Works Co-operative Society. The wages form an important component of the total cost accounting for an average of almost 35 per cent. The labour-intensity of Bidri is again illustrated. Raw-material is another important item of cost and accounts for an average of over 40 per cent of the total cost.

The sales have steadily increased over the years. During 1959-60 the sales figure was Rs. 28,953 which rose to Rs. 42,824 in 1962-63. The production has also had the same trend and has risen from Rs. 36,385 in 1959-60 to Rs. 46,604 in 1962-63. There has been a slight decline of about Rs. 1,000 in the production during 1962-63 as compared to 1960-61 and 1961-62.

The society has been earning profits regularly and has been progressive.

TABLE 5
Consolidated Statement of Pro forma Accounts of Mumtaz Bidri Works Co-operative Society—30th August 1964

<i>Sl. No.</i>	<i>Particulars</i>	<i>1959-60</i>	<i>1960-61</i>	<i>1961-62</i>	<i>1962-63</i>	<i>Remarks</i>
1.	Wages	11961.28	13695.22	13305.11	15937.25	
2.	Contingencies (including rent)	668.00	542.20	217.53	269.97	Year 1961-62 1962-63 not audited
3.	Raw materials	7375.65	15427.42	14790.80	16157.30	
4.	Salaries	2996.00	2492.00	1200.00	1200.00	
5.	Depreciation	682.00	334.00	483.51	532.47	
6.	Interest on Govt. loan	—	—	360.56	374.32	
7.	Audit fees	30.67	35.57	—	—	
		<u>23713.60</u>	<u>32526.41</u>	<u>30357.51</u>	<u>34471.31</u>	
1.	Sales	28953.48	29131.59	36506.92	42823.74	
2.	Production	36384.98	47512.90	47955.57	46604.00	
3.	Profit	245.22	284.55	754.72	207.07	
4.	Balance at the end	<u>2967.39</u>	<u>2096.53</u>	<u>2258.65</u>	<u>795.78</u>	
		<u>68551.07</u>	<u>79025.57</u>	<u>87475.86</u>	<u>90430.59</u>	

CHAPTER VII

Case Study 3

Himroo

Himroo ranks along with Benaras brocades for its luxurious sophistication. Made at Hyderabad and Aurangabad (Maharashtra) Himroo is derived from an ancient style of weaving known as "Jamaiwar" and was brought to India by the Moghuls. The settlement of many weavers in the Aurangabad region provided an impetus to the industry, and it is said that over 15,000 Himroo looms operated in the area. Under the artistic patronage of emperor Aurangzeb (1658-1707) Himroo fabrics made great progress and were widely used among the nobility. At about the same time another fabric of the Himroo family also came into vogue; made of a mixture of cotton and silk "Mashroo" was mostly used because it was permitted as an apparel, during prayers, by the holy "Quran". According to the Islamic Law, Mohammedans were not allowed to wear pure silk fabrics specially at the time of prayer, whereas a silk fabric woven with a mixture of cotton did not have such religious restriction. Therefore mixed fabrics were woven for the ruling Muslim noble class. At first this type of weaving was known as "Hamroo" which meant alike on both surfaces. By popular usage the term Himroo came into vogue and is in use today. Other noted fabrics of the Brocade family are "Mushajar" and "Kinkhwab".

Himroo consists of cotton yarn for warp and silk and art silk for weft, elaborately woven in spotted stripped or floral design. The Kishti or boat design and Kairi or mango design are much sought after. The cloth is an extra weft figuring fabric

having a solid coloured ground of satin or twill, and makes exquisite stoles, furnishing material, dressing gowns, ladies coats and accessories.

The Aurangabad District Gazetteer (1884) contains a detailed account of Arts and Crafts which were being practised at that time. Referring to Himroo and Mashroo, the report says, "These are well-known fabrics for which our Aurangabad is famous. These were woven with a cotton warp and weft of pure silk in spotted or stripped patterns, and having the lustre of satin. There were 35 units manufacturing Mushroo; the Mushroo after being woven was washed in Rhita "Sapeindus-Emarginatus" and sweet lemon which gave the fabric a kind of gloss. It was generally used by the ladies as garments, whereas Himroo which was similar in most respects to Mushroo was turned into vests and tunics. The owners of Mushroo works were Gujaratis while Himroo units were owned by Bohras. The weavers were usually Khathris or Muslims.

The origin of Himroo Industry at Aurangabad is linked with the advent of Muslim rule in South India. During the 14th century when Mohammad Bin Tuglak shifted his capital to Deogiri (now known as Daulatabad which is about 10 miles from Aurangabad) many artisans came along with him and settled down around the capital. Amongst them were the weavers of the fabrics worn by noble men and their family. Three centuries later, when Aurangzeb made Aurangabad his headquarters the industry came to be established in the city proper. Since that time, the name of Aurangabad was associated with Himroo. Himroo weaving was flourishing nearly 200 years ago as it was a popular fabric among the Nawabs and elite and formed an indispensable part of the dowry at the time of marriage. With changes in sartorial fashions the craft received a set back. During 1930's the Department of Industries and Commerce of the H.E.H. the Nizam's Government, Hyderabad, took steps to give a fillip to this declining craft and also helped in its sales promotional activities. Thus bulk orders were placed from the Royal Palace and some publicity measures were also adopted. The Second World War brought a set back to the Himroo Industry and a number of factories had to close down. Many wea-

vers who were in the profession for generations had to adopt other means of livelihood. The Post-war period and particularly after the formation of the All India Handicrafts Board in November 1952, the Industry has made steady progress and has found a new home in Hyderabad.

A number of Himroo weavers thus came to Hyderabad and formed two co-operative societies styled as Furnishing and Allied Fabrics and Industrial Co-operative Work Centre, Amberpet, Rajtex Handloom Himroo Fabrics Industrial Co-operative Society which was subsequently wound up; four private karkhanas namely the Himtex Fabric, Amberpet, Prem Luck Himroo Centre, Nallakunta, the Handloom Himroo Works, Saroonagar, and the Ajanta Fabrics, Karwan, were also started.

All the processes from designing to weaving Himroo are undertaken at each of the establishments. Usually dyeing of the yarn is also done at the centres, but some of the smaller establishments either buy dyed yarn or get it dyed after paying the dyeing charges at one of the cooperative societies. The tools and equipment used by the craftsmen are those employed in the Handloom weaving industry. The main item is the loom, a large majority of which are wooden pit-loom; the looms and their accessories are usually made locally.

In recent years, Jacquard looms are also being used for producing Himroo. But the main disadvantage in this technique is the limited number of colours which can be introduced in the weaving.

Children are usually employed to work on the "Jala", which besides being economical, also serves as an apprenticeship for the young trainees. In a couple of years the trainee evolves into full-fledged Himroo craftsman, thus providing an adequate work force in the Himroo Industry.

The main raw-materials used in weaving Himroo are three kinds of yarn, viz., cotton, staple and rayon (Art Silk). Different shades of dyes are used in the dyeing process and sometimes pure or silk khadi is also used in making Himroo.

Generally, staple yarn of 2/60's counts and Cotton Yarn

of 20's counts is used, while Rayon of 150 denier is required.

The average daily earnings of a weaver depend upon his output, and skill and range between Re. 1 and Rs. 3 per day.

Costing

Raw-materials are the most important factor and account for 72.6 per cent of the overall cost in power loom and 26.9 per cent in handloom. The consumption of colours, cotton and staple yarn per shawl does not differ significantly between the two sectors, but silk yarn consumption is far more in power looms and accounts for the difference between the two sectors, as far as the raw-material components are concerned. The higher consumption of art silk yarn in power looms could be due to the fact that it is also used very liberally in the warp of the Himroo shawl without being woven on power looms.

Designs

The paintings from the Ajanta frescoes seem to have exerted considerable influence over designs in the Himroo Industry. Some of these traditional designs bear the names of the weavers originating them. The co-operative societies and other establishments have a stock of traditional designs which are also used and are adapted from time to time. There are distinct florals of the Persian school which are discernible in the Himroo fabric. This is due to the early Moghul influence on the craft, which even today retains its freshness and appeal. The design centres of the All India Handicrafts Board and the Handloom Board have also supplied various designs.

Organisation at Hyderabad

There are four Himroo Centres in the city of Hyderabad among which two are co-operative societies and the other two are proprietary concerns.

Rajtex Handloom Himroo Fabrics Industrial Co-operative Society has been defunct.

The Furnishing and Allied Fabrics Industrial Work Centre is situated at Amberpet and was registered as a Co-operative

Society on 24 August, 1955, with Registration No. 2112. Twenty skilled workers and 25 semi-skilled workers are employed.

The skilled workers earn from Rs. 1.50 to Rs. 3.00 per day while the unskilled worker earns Re. 1.00 per day.

The working capital of this society is Rs. 4,000. and Rs. 3,500 have been invested in tools and equipment.

A worker can produce 8 shawls per month and if working on piece rate is paid about Rs. 6.00 per shawl.

The equipment includes looms, warp, jalas, shutters, etc. The Centre produces articles such as shawls, curtains, and furnishing material.

The Government has given a loan of Rs. 4,000 to be repaid within a period of 10 years. The Management feels that further assistance to the extent of Rs. 8,000 towards working capital and Rs. 2,000 towards looms would help in increasing production and employment.

Household Survey

Among the 78 craftsmen surveyed, 35 were found to be literate. Seventeen families consist of more than one craftsman, and the average size of the family is 5. The average income of the family is Rs. 93 per month, whereas the expenditure per family is Rs. 100. Only 5 families have other sources of income mainly from landed property or rentals. A majority of the craftsmen reside in rented houses, the amenities in which are extremely poor. Out of the 61 households surveyed, only 30 had attached bath-rooms, 30 had latrines, 8 had water facilities, and only 4 were electrified. The average incidence of indebtedness of a family was Rs. 70 per year. The purpose of the debt is either for celebrating a marriage, medical treatment or domestic expenditure.

Forty-one (or 66.23 per cent) among the 61 households surveyed lived in rented houses. Twenty among 61 (i.e., 33.1/3 per cent) lived in their own houses.

Marketing

The bulk of the production is marketed through the Gov-

ernment Handicrafts and Cottage Industries Emporium at Hyderabad and its branches in the districts. Some supplies are also made to the Central Cottage Industries Emporium, New Delhi and other leading emporia in the country. There is no serious marketing problem and most of the production is sold. However, with more concerted marketing efforts and a systematic study of consumer preferences even greater consumption of Himroo products would be possible, enabling expansion in production. The Textile Designing Centre at the Village Industries Artisans Training Centre, Mushirabad has produced numerous textile designs, many of which have not been communicated to the craftsmen. It is recommended that the Textile Designing Centre may be merged with the Research and Design Centre at Hyderabad so that a coordinated effort at design, production and extension could be undertaken. The textile wing has also specialised in designs for carpets, Kalamkari and Sarees.

The powerloom factories which were hitherto manufacturing items like sarees and bed-spreads, have now taken to weaving Himroo shawls. Due to their technological superiority they have a cost advantage and provide severe competition to the handloom Himroo. Restrictions regarding the quantum of Himroo shawls to be woven on powerlooms may be considered as an effective step to provide relief to the Handloom Himroo sector. Alternatively, a cess on Himroo shawls woven in the powerloom factories may be levied to offset the cost advantage in favour of powerlooms.

Technological improvements in the Handloom Himroo sector will also have to be taken up urgently and research centres charged with the responsibility of evolving looms for greater productivity and with lesser effort. Though Jacquard looms may be an answer to this problem, there are restrictions in the number of colours that can be used and hence there may be a monotony in the final product. However, a section of the Handloom Himroo may switch over to Jacquards looms, over a phased programme. Research on Jacquards looms, to enable more colours to be used, can also be undertaken fruitfully, resulting in effective measures to meet the competition from powerlooms.

The introduction of Jackquards looms however will eliminate the existing practices by which helpers on the pit looms become trained weavers after some time. Therefore the need for the introduction of training schemes becomes important along with the supply of Jackquard looms on hire-purchase basis.

There is some difficulty in the obtaining of raw-materials particularly yarn in the open market at competitive rates. Measures can be taken to have an annual quota fixed from the office of the Textile Commissioner to enable procurement of good quality raw-material at competitive prices.

Himroo may also be woven in woollen yarn, which could be particularly useful in cold western climates. Experimental production in this regard has been quite encouraging and there is scope for its introduction in a larger measure.

The analysis of cost for weaving Himroo shawls reveals that the raw-material would account for 26.9 per cent while wages would be 53.1 per cent. The remaining 20 per cent includes cost of overheads and profits to the society.

TABLE 6
Consolidated Statement of Pro forma Accounts and Balance-Sheet

Sl. No.	Particulars*	1958-59	1959-60	1960-61	1961-62	1962-63
1.	Wages	10,463.76	16,444.31	21,679.97	19,568.34	20,780.51
2.	Raw materials	6,633.84	5,839.71	8,335.46	7,797.54	9,652.98
3.	Contingencies	2,002.54	2,585.78	1,813.81	1,839.53	2,016.65
4.	Salaries	4,349.46	4,245.98	4,656.00	3,802.97	4,916.77
5.	Depreciation	377.00	668.80	750.36	679.42	
6.	Interest on Govt. loan	150.00	180.00	356.23	—	—
7.	Audit fees	40.00	166.00	100.00	—	—
8.	Managerial assistance	—	—	—	—	—
9.	Share capital	611.67	359.00	535.73	467.56	352.47
10.	Sinking Fund	777.88	549.66	717.63	576.51	597.20
11.	Helpers Deposit	—	134.67	209.70	143.98	158.36
12.	Grants from Government	3,375.00	2,475.00	3,049.00	2,000.00	2,196.77
13.	Production	17,371.33	37,162.51	49,546.21	46,177.96	47,392.75
14.	Sales	23,940.33	36,676.93	49,243.48	44,978.28	40,836.46
15.	Profit	487.85	3,424.35	970.61	1,634.12	8,118.35

It may be seen from Table 5 that the production of the society has increased from Rs. 17,371.33 in the year 1958-59 to Rs. 37,162.52, i.e., an increase of about 114 per cent.

In the year 1960-61 the production increased to Rs. 49,546.21 and incidentally this represents the peak year of production and sales of Himroo products. The percentage of increase compared to the year 1958-59 is 185 per cent and compared to the previous year, i.e., 1959-60 is 33.3 per cent.

In the year 1961-62, the production had slightly decreased compared to the previous year, i.e., 1960-61 and stood at Rs. 46,177.96. The decrease compared to the previous year was about 0.08 per cent. It may be noted here that the production when compared to the years 1958-59 and 1959-60 was on the increase.

The society has all along been earning profits, from Rs. 488 which was the lowest in the year 1958-59 to Rs. 8,118.38 (un-audited) in the year 1962-63.

CHAPTER VIII

Case Study 4

Silver Filigree

The Silver Filigree Industry is practised at two leading centres in India—Cuttack in Orissa and Karimnagar in Andhra Pradesh.

The Silver Filigree Industry of Karimnagar started over 200 years ago when Elgandal was the headquarters of the district. Some of the goldsmiths specialised in this craft and thus silver filigree became a part of goldsmithy and was practised by a community known as Viswakarmas. It is said that Shri Kadarla Ramayya of Elgandal and Shri Sreeramaj Venkatramayya of Manakondur both of whom belong to the traditional goldsmithy community of "Kamsali" originated the industry. Elgandal and Manakondur are villages lying within a distance of about 7 miles from Karimnagar. Elgandal was the district headquarters of the then existing administration. Judged by some of the old designs and the products of this Centre, it would seem that the craft and designs had been influenced by foreign countries, particularly the Middle East. There is no recorded history, regarding the origin of the industry. The present workers who are the direct descendants of the founders of the industry, state that their ancestors used to tour abroad and it was quite likely that they had picked up the techniques and designs from these countries and with their own dexterity developed it here.¹

1. Census of India, 1961, Volume 2, A.P. Part 7, Rural Craft Survey (Filigree Ind.) by A. Chandrasekhar, IAS., Superintendent of Census Operations, A.P., p. 1.

When Karimnagar became the district headquarters the Silver Filigree craftsmen moved here as it offered a wider market and greater facilities. Venkatesham and Venkatramayya were two of the earliest craftsmen whose memory is even today respected by the silver filigree workers. The subedar of Karimnagar permitted the use of an entire locality called "Kota Bazar" for settling the Silver Filigree craftsmen that migrated to Karimnagar.²

The Industry was patronised by the aristocracy and the articles produced were intended to serve the affluent sections of the community. Thus there was scope for limited operation and concentration of the craft in one particular place. In more recent years there has been a tendency for producing smaller and less expensive items which are also useful for middle-class families.

In 1930, the Talukdar Mr. Shaik Yaver Ali brought some samples of Silver Filigree Work from Cuttack. Thus several new designs and ideas were introduced in the craft. The main difference between the Silver Filigree of Karimnagar and that of Cuttack is that while in the former two round wires are intertwined, in the latter only one square wire is used.³

In 1911, Silver Filigree articles were selected for the Delhi Durbar and the Calcutta Exhibition, where they were awarded certificates of merit. In 1925 in the All-India Bombay Exhibition a special demonstration of Silver Filigree was arranged which attracted appreciative attention.

There are 35 families in Karimnagar town, all of them belonging to the Kamsali community (goldsmiths and silversmiths) who are now engaged in this industry.

Eighty of the silver filigree workers organised themselves into a co-operative society styled "Tarkushan Industrial Co-operative Society" in 1953, which practically holds the monopoly of the craft. "Tarkushan" in Urdu means drawing of wire. The Society has been addressing itself to organisational and financial development of the craft and has also taken steps in mar-

2. *Silver Filigree* by M.N. Upadhyay, "Andhra Pradesh" Journal of the Department of Information and Public Relations, Govt. of Andhra Pradesh, Nov. 1963, p. 18.

3. *Ibid.*

keting the products. Government assistance in the form of loans and grants has been instrumental in helping the craft to ward off a critical phase in its growth.

Raw-materials—Manufacturing process

The raw-material used in the Karimnagar Silver Filigree Industry is pure silver, while alloys are used in other parts of the country. Besides silver, a small quantity of copper and brass are needed for soldering the filigree pieces. The equipment required is Bee wax "Nawsagar", "Gumchies", "Bhoosa", sulphuric acid and coal.

The manufacturing process is very intricate and is outlined here in brief; it commences with the drawing of silver wires, with the aid of machines of 14 gauge. Before Government assistance was provided for buying wire drawing machine, silver ingots were beaten on an anvil and elongated into a rough wire. The wire was put through a steel wire gauge known as "Jantharpatti" or "Kambechchu" which had apertures of different gauges. One end of the wire was passed through the Kambechchu so that as the wire was drawn through a particular gauge, it also attained that gauge. The wire had to pass through several smaller gauges until the required gauge was reached. This process was both laborious and time consuming and the hand-operated drawing machine has facilitated the easy drawing of silver wire. Even now the "Kambechchu" is used to draw finer gauges, down to 34 gauge as the drawing machine can be operative only till gauge 14. Sometimes a circular disc called "Ravvabilla" with an aperture at the centre is used for drawing smaller gauge wires.

The next stage consists of twisting the thin silver wire and flattening it. This is perhaps the most important stage of operation before the design is executed.

Two strands of the silver wire of 34 gauge are wound together with the aid of a "charkha". Before winding, the wire is heated in a charcoal furnace. The strands have to be wound and rewound thrice over, till ultimately a fine pleated string of silver is obtained. The wound wire is rolled and put in a fur-

nace, which is an earthen pot broken into half and the closed half kept in an inverted position with burning coal, for two or three minutes.

The pleated wire is cut into small pieces of 2½" in length. Each piece is then flattened carefully on an anvil by beating lightly with a hammer. The flat strip that results is about 36 gauge with granular edge or pleats on either side.

The preparation of thin flat silver strips within the wire with fine granular edges contains the secret of filigree work. These flat pieces are later bent into different shapes and fixed vertically within a frame.

The article to be produced is made up of a number of component parts that are pieced together. Each of these parts is made into a block with an outer frame within which the required design is worked out and the final details filled in. For example, Pandan or a box to carry betel leaves and nuts, will be made up of 5 rectangular blocks namely the four sides and the lid being joined together and fixed on to a silver plate bottom. Each of these rectangular blocks have a silver frame within which the required design is made up by shaped pieces being put together and fixed.

Designs and products

The filigree products are generally designed with an eye to elegance. Trays, Pandans, flower vases, cigarette boxes, buttons and jewellery are popular creations. Other products include kum-kum boxes, scent holders, ash trays and peacocks.

The designs are generally florals with creepers, leaves and flowers. The filigree industry can execute any other design that is required. The best known design is known as the Karimnagar design which reflects a high degree of exquisite workmanship.

Organisation

In view of the critical situation faced by the Tarkushan Society, it has been afforded considerable financial assistance. In spite of the severe competition from mechanised and cheaper silver filigree from other States, the Karimnagar society made

a steady recovery. Undeterred by the onslaught of mechanisation in other parts of the country in the Filigree Industry the Karimnagar worker stuck to his guns and was loyal to his technique and faithful to the purity of his raw-materials. The decline in royal and aristocratic patronage was also a hard blow, and the society had indeed to face a critical situation. However, in 1957 the Government provided aid and enabled the Tarkushan Industrial Co-operative Society to obtain credit facilities to the extent of Rs. 25,000. The Society repaid Rs. 10,000 and has also acquired their present office-cum-workshop at a cost of Rs. 7,000. The society has also received an outright grant of Rs. 5,000 in 1956-57 with which three wire drawing machines costing Rs. 1,200 each were acquired. The State Government also sanctioned managerial assistance of Rs. 3,000 from 1957-58 to 1960-61

Costs

The cost of an article can be divided under two broad heads: (a) cost of silver, and (b) wages. The cost of an article is fixed on the basis of its weight in silver. Even the wages are arrived at on a graded scale with reference to the weight of the article.

The cost of silver in an article of 12 tolas weight is taken as Rs. 25.

The labour charges are worked at the rate of Rs. 2 per day per craftsman. It is reckoned that a craftsman will be able to work two tolas of silver a day.

Production and Marketing

The average annual production amounted to Rs. 16,496.98. The Government Handicrafts and Cottage Industries Emporium, Hyderabad, purchased articles worth Rs. 10,425.56 while articles worth Rs. 9,697.55 were sold in the open market. Since there is no regular demand for the articles these are produced as per orders placed on the society. Generally, the workmen are fully employed during November to May when there is a boom in the market.

It is possible to increase production by at least 35 per cent if more orders are forthcoming. This again involves concerted marketing efforts including publicity and sales promotion. The products could also be supplied to leading emporia throughout the country. It is also possible that an export market could be found for these products which would go a long way in stimulating the silver filigree industry.

One of the problems faced by the Society is the delayed payments received by it from the Government Emporia. In spite of the fact that the State Government has afforded financial assistance the silver filigree industry at Karimnagar has not yet been organised in a rational way. Its greatest requirements seem to be standardisation of designs and products, improved workshop facilities and above all a stimulated demand which could be provided for by a vigorous and dynamic marketing policy. With the provision of effective demand, the society will be able to produce more and will also work to its full capacity.

The Research and Design Centre at Hyderabad has made some initial progress in the evolution of simple tools which could save time and improve production. If these tools are patented and distributed among silver filigree workers it would be possible to have far greater production at possibly lesser costs. There is also a need for the realigning of designs to suit modern requirements. Perhaps the most effective medium in which silver filigree may express itself is in terms of jewellery. With the introduction of the Gold Control Order and the subsequent shortage of and restriction in the production of gold ornaments, silver has come into its own and silver filigree may well be the answer for the ornament-conscious part of our population. Silver filigree could also be the base for rolled gold or gold-covered ornaments which are being made with such characteristic finesse at Masulipatam and other parts of Andhra Pradesh. Gold-covered filigree will not only be novel but will also provide a new dimension in jewellery and ornamentation in India.

The table (p. 100) details the pro forma accounts and balance sheet of Tarkushan Industrial Co-operative Society, Karimnagar. Like most other Handicrafts, Silver Filigree is also labour intensive, more so than others. Thus wages constitute an

TABLE 7
Consolidated Statement of Pro forma Accounts and Balance Sheet of Tarkushan Industrial Cooperative Society Ltd., Karimnagar

Sl.No.	Particulars	1956-57	1957-58	1958-59	1959-60	1960-61	1961-62	1962-63	Total
1.	Wages	1086.24	5630.69	4028.69	4951.77	3013.58	3099.15	3935.08	25745.17
2.	Raw materials	3078.72	5816.92	6396.08	10017.45	5804.13	7300.44	7834.59	46248.33
3.	Contingencies	450.90	2187.17	1423.42	1456.86	1328.04	1598.96	1101.91	9887.26
4.	Salaries	—	2523.88	2956.92	2740.20	2790.00	1947.50	1510.00	14473.30
5.	Depreciation	—	—	—	92.10	130.10	117.10	110.21	449.51
6.	Interest on Govt. capital	—	906.25	775.18	775.18	775.18	775.18	775.18	4782.15
7.	Audit fees	—	59.63	314.13	157.90	114.00	—	—	645.66
8.	Supervision charges, if any	—	—	—	—	—	—	—	—
		4615.86	17129.51	15891.42	20191.26	13955.03	14838.38	15266.97	102231.28
1.	Production	4902	20969.94	15501.31	17127.06	12389.59	14296.80	17640.30	102827.21
2.	Sales	2808.97	21792.29	18417.63	17984.05	13309.05	16743.73	19600.97	110656.71
3.	Profit	—	792.95	2512.99	1332.13	908.64	—	—	5457.71
	Grant	69.43	—	—	—	—	1072.40	1347.23	2489.06
4.	Budget Provision :								
	Profit	25000.00	—	—	—	—	—	—	25000.03
	Grant	5040.00	2997.21	2999.99	2999.75	1800.00	2500.00	—	18296.95

SOURCE : Assistant Director, Industries and Commerce, Karimnagar.

important part of the total cost and range from 35 to 50 per cent. The Raw-material, which is pure silver, also accounts for a comparable percentage in the cost and also ranges from 35 to 50 per cent. Other items like contingencies, salaries and interest on Government capital account for the other cost.

The production in the Society has been fluctuating cyclically. The rise in production during a year is invariably followed by a drop, which is again picked up in the following year, only to drop again. Thus the production increased from Rs. 4,902 in 1956-57 to Rs. 20,970 in 1957-58. It dropped to Rs. 15,501 in the following year but rose to Rs. 17,127 in 1959-60. 1960-61 saw the production drop to Rs. 12,390, which improved in the following year to Rs. 14,297.

The sales have also been fluctuating from year to year. Starting with Rs. 2,809 in 1956-57 the sales figure rose impressively to Rs. 21,792 in 1957-58. The sales decreased progressively during the next three years and reached the value of Rs. 13,309 in 1960-61. The position was recovered in the following two years when the sales showed Rs. 16,744 in 1961-62 and Rs. 19,601 in 1962-63. This fluctuation in production and sales has been a recurring phenomenon. Correspondingly, the profits have also been fluctuating and there is a need for stabilising production, sales and costs and a rationalisation of the Society's working.

Case Study 5

Kondapally Toys

Origin and Development

Kondapally is a village situated at a distance of about 12 miles from Vijayawada in the Krishna District of Andhra Pradesh. The village is situated at the foot of a thickly wooded hill, whose forests abound in a light and soft wood specially suited for the manufacture of toys. The village has a population of 6,000 people among whom sixteen families of "Arya-Kshetriyas" are engaged in the toy industry. Others live on agriculture, stone breaking, village service, collecting forest produce and in the production of "Rasakaspura Bhasma", for which the village holds a unique name.¹

The skill of toy making is found in a closely knit community and originated in 1362. Historically it is said that a group of 200 families, among whom were toy makers, migrated from Rajasthan due to difficult conditions there and settled in and around the Krishna District in Andhra Pradesh. The number has since dwindled and many of them have taken to more lucrative callings.²

The wood available in the surrounding forests is known as

1. All India Handicrafts Board—An Economic Assessment of Kondapally Toys, 1961.
2. Kondapally Toys, M.N. Upadhyay, Department of Information and Public Relations, "Andhra Pradesh", July, 1963, pp. 38-39.

Punki wood (*Gyrocarpus-Asiaticus-Glotia-rattile formis*), which is light, soft and strong.

A special feature of the Kondapally toys is their highly stylised characters depicting various occupational patterns obtaining in a typical Indian village. Other subjects portrayed among Kondapalli toys, are animal figures, mythological characters, including the "Rasleela" of Krishna and the Dasavathar set. Their form and colour have set a distinct pattern in toy making.

A remarkable feature of the Kondapally Toy Industry is its faithfulness to tradition and few, if any, changes have been made in the form and colour of the toys since their inception.

Raw-materials—Manufacturing Process

The raw-materials used by the Industry are punki wood "Tello Punki", tamarind seeds, colours, paints, gum arabic, imitation gold leaf and nails. All the raw-materials are locally available; the wood which is abundantly available in the neighbouring forests is consumed to an extent of 30 tons annually by the Toy Industry. Since seasoned wood is not available, it is cut and dried in the shade and in the slow heat of burning paddy husk and saw dust. In the past, vegetable and mineral colours were being made and used, but with the advent of inexpensive powder and water colours, the indigenous techniques have been discontinued. The consumption of synthetic colours, which is available locally, is valued at Rs. 2,000. There has never been a dearth of raw-material for the industry; its main problem is lack of skilled craftsmen and ready markets.

The tools used are simple and include sledges, hammers, marking gauges, chisels, cutting pliers, Carborandum stone grinding machine, etc., all of which are locally available. There is a need for devising improved tools and simple machinery with a view to reducing cost and increasing production. The application of colours also needs to be improved as the finish is, sometimes, quite unsatisfactory. The artisans make their own brushes, from squirrel hair, for applying colour to the toys. The cost of the equipment of an average artisan ranges between Rs. 100-150.³

3. All India Handicrafts Board, *Economic Assessment of Kondapally Toy Industry*, p. 2.

The manufacturing process takes 6-10 days including the period taken for artificial seasoning of wood. The first step in the manufacturing process is the cutting of wood into required sizes; a triangular piece is cut from large blocks according to the size of the toys required. These pieces are subjected to a process of slow heating with the aid of saw dust to eliminate moisture. The main form is carved out with the aid of a sharp chisel. Later, the surface is filed and fixtures like hands, fingers, ears, nose, etc., are joined to the main body, with an adhesive paste made of tamarind seeds. It is interesting to note that the tamarind seed paste "Chintambali" used here is also used in Nirmal Toy making. The paste also serves to set right malformations. The next step consists of the application of light glue which is followed by a process of drying. The last stage, which involves considerable skill, is the finish and painting of the toys in suitable colours. Kondapally toys are known for their charming colours and are much sought after. Both oil and water colours are used for painting; though oil colours are more expensive they provide a more attractive finish and longer life to the toy.

A scientific division of labour exists in the toy industry and the elder members usually take up the more difficult parts of the operation. The painting is done by women while the children help in collecting wood and in the making of basic shapes.

Designs and products

Kondapally toys are known for their highly stylised character which is one of the main reasons for their popularity. The designs are mostly traditional and hardly any innovations have been made either in designs or colour schemes. This loyalty to tradition has not adversely affected the popularity of the toys. A remarkable feature is that there is a freshness and naive charm, even though few new designs have been added.

The products include the Dasavathara set portraying the incarnation of Vishnu in various manifestations or "Avatharas", Rama, Laxmana, Scetha and Hanuman, a set of 12 toys depicting Indian School Children, a set of 24 toys portraying Indian tribesmen, the Goddess Saraswati playing Veena, the Goddess

Laxmi on the Lotus flower, occupational patterns obtaining in a typical Indian village including the Sadhu, the Fishermen, the Policemen, the Washermen, the peasant and his wife, etc. Birds are also made among Kondapally toys, outstanding among which is the peacock, which has been declared as the National Bird. The Ambari elephant is a striking creation with its richly ornamented and gaily caparisoned "Howda". A model Indian village can be assembled with a set of Kondapally toys including houses, temples, toddy tappers, occupational patterns, policemen and the regal ambari elephant. There seems to be some stagnation in designs and it may be well worth the while to create new forms in the same style so that the changing life in a village may be portrayed. Emphasis on developmental activity including panchayat samithis in session, community development, family planning, etc., in the same style may create new interest and would be of educative value. Lack of standardisation is a major problem and is a deterrent to effective marketing. Effective steps towards standardisation will be a step in aid to higher quality and wider markets.

Organisation

The Kondapally Toys Manufacturing, Purchase and Sales Society Ltd. was registered in January 1936, with a membership of 49 and share capital of Rs. 2,050. The total capital in the form of tools and equipment invested in the Industry at Kondapally is estimated at Rs. 2,500. The Industry provides gainful employment to 20 skilled craftsmen and about 20 to 30 of their dependents. The total employment is estimated at about 50. The annual production is of the value of Rs. 22,000 including that of the three craftsmen, who are working on their own. The craftsmen and office-bearers of the society judge the articles before acceptance. The existing craftsmen are able to meet only about 1/5th of the total demand. Supply is inelastic due to the scarce factor of skilled labour, as it requires about 18 months for a trainee to learn the craft.⁴

The Purchases and Sales Co-operative Society was organised to arrest the declining trend in the craft and to put the toy

4. *Ibid.*

industry on a sound economic footing. The Society started functioning with a modest capital of Rs. 85 and a membership of 14 individuals. The growth of the society was affected even from the initial stages by the malpractices of some of the members who were selling their toys directly to customers, quite contrary to the rules of the Society. Till 1945 the annual turnover of the Society did not exceed Rs. 3,000. There was another set back in 1951-52 when some of the members deserted the Society and stopped selling through it. As a result of this the turnover of the Society during the year decreased to Rs. 903. Since 1952-53 there has been a steady improvement in the Society's sales.

Although there has been an upward trend in the sales during recent years, the financial position of the Society has not shown any appreciable improvement. This is partly due to the accumulated losses incurred during the earlier years. A sum of Rs. 2,621.75 p. was advanced to workers and others which became a bad debt on 30th June 1964. Out of 49 members on the registers of the Society, only 23 are artisans and the rest are sympathisers. The Society buys toys from its members at agreed rates on cash basis and sells them at fixed prices which includes a mark-up of 19 per cent; 16 per cent being Society's commission while three per cent is credited to the artisan members' thrift deposit account. The share capital of the Society as on 31.12.1958 was Rs. 2,257 and the reserve fund was Rs. 92.12.

The All India Handicrafts Board sanctioned a grant of Rs. 5,000 as working capital to the Society in 1954 which saved the Society from a difficult situation. The society has a cash-credit account with the Vijayawada Central Co-operative Bank Ltd., with a limit of Rs. 3,000. The Government of Andhra Pradesh gave a grant of Rs. 900 to the society during the years 1954-55 and 1955-56 towards the remuneration of the Manager and a further sum of Rs. 400 during the year 1956-57. But the working resources of the society are still far from satisfactory. There is a two-fold need to improve the output of the society. First, a system of incentives may be introduced which would be operative for supplies over and above the fixed quota for each member, on a sliding scale basis. Secondly, there is a need for

training more artisans and ensuring better marketing facilities so that higher emoluments in other callings may not act as a deterrent to members to continue in the society. So far the trend has been, for trainees, to avail training facilities and then to deviate to a more lucrative calling. Unless long-term measures are adopted and a guarantee of minimum wages are ensured, it will not be possible for the society to hold on to members. There is also a need for introducing an objective evaluation of standards of production. Since the members of the co-operative also judge or accept production from their colleagues, it is not possible to ensure the highest standard and finish. Once second rate production is accepted, there will be no reason for the craftsmen to attempt anything better. Rejections by members of the co-operative will not be possible because there is a kinship feeling among them, and rejections are treated as prestige issues and hinder the harmonious growth of the society itself. Often, disagreements on standards of production have been the *raison d'être* for members to form factions which undermine the development of the society itself. It is therefore suggested that a quality marking scheme be introduced to cover the toys.

Age group and Economic status

The Kondapally toy manufacturing Co-operative Purchases and Sales Society has 20 skilled craftsmen. Six skilled craftsmen are operating privately in the Cottage Toy Centre which is a proprietary concern.

Sixteen members are self-supporting while 9 are earning dependents. One of the members is a dependent. The Household Survey of the craftsmen shows that most of them do not have modern housing facilities in spite of the fact that they live in their own ancestral houses.

Eighteen households were enquired into to make a study of their living conditions. The survey revealed that 61.1 per cent of them owned houses; 72.2 per cent do not have bathroom facilities, 88.8 per cent do not have latrines and none of the houses have electric connections. The average size of the family

was only three. The average monthly income of 18 households was found to be Rs. 100 while their expenditure was about Rs. 104. The earnings of a skilled craftsman range between Rs. 100-150 per month and that of a semi-skilled craftsman between Rs. 60-90.

Costing and prices

Detailed records are not available to analyse the costs of production. Estimates furnished by the spokesmen of the society and corroborated by individual craftsmen indicate that the raw-material cost accounts for only 15-20 per cent of the total cost. Overhead expenses are insignificant and wages form the major element of cost, accounting for 72-80 per cent of the total cost structure. In addition to fair wages the craftsman can also earn a small profit.

One of the major needs of the Toy Industry at Kondapally is wood seasoning facility. The process of drying the punki wood in vogue is crude and time-consuming. Often there are complaints regarding cracks in the wood, bad finish and colour fading. A wood seasoning plant and standardisation of process and quality of colours, designs and sizes will go a long way in putting the Industry on a sound footing.

Dearth of trained craftsmen is perhaps the greatest problem in the growth of the Industry. Though attempts have been made to train apprentices there has been no appreciable addition to the number of craftsmen in the industry. The Government could review the training scheme and provide conditions for the trainees to continue in the Society.

The number of toy making families were 50 about 35 years ago. Now the number is 16. But the demand for the toys has progressively grown. The Kondapally toy manufacturers Purchases and Sales Co-operative Society established in 1936 and re-organised in 1953 includes all the families except one. The total number of skilled artisans is only 19 of which 17 work in the Society. The number of artisans are not growing in spite of training facilities provided at Government expense. The trainees after completion are drifting to other avocations which

must be prevented. The society has always more orders than it can execute.⁵

Marketing

The Co-operative Society has contacts with leading Handicrafts Emporia throughout the country who account for a major part of the sales of the society. During 1957-58 the society sold toys worth Rs. 17,328.

Though the Co-operative Society has made contacts throughout the country it needs to be supported by a vigorous publicity and sales promotion drive. At present, no publicity worth the mention is being afforded either to Kondapally toys or to any of the other Handicrafts of Andhra Pradesh. In line with modern marketing methods and to effectively create new markets, a well-organised and vigorous sales promotion drive supported by wide publicity would be most effective. It is suggested that three per cent of the turnover of Handicrafts should be reserved for publicity and sales promotion, which may include the issue of illustrated catalogues and pricelists, advertisements in leading newspapers and journals in India and abroad, the making of colour films, including manufacturing processes to be exhibited through trade commissions abroad, the holding of special exhibitions, the conduct of market research in special areas and the deputation of trade teams to Europe and America. A careful analysis of the demand patterns of Handicrafts of Andhra Pradesh at International Fairs must be made by experts and trade interests invited specially to view the products. Details and specific information, regarding production schedules, prices, F.O.R./F.O.B. destination, packing methods and delivery time has also to be furnished without which trade interests will not be interested to place substantial orders. The names and addresses of interested parties along with a report of their specific requirements and suggestions pertaining to their preferences in terms of designs and colour schemes has to be relayed to the marketing and production personnel in the State so that effec-

5. Indian Co-operative Union—Survey of Associations of Handicrafts Artisans, Dealers and Customers—sponsored by the All India Handicrafts Board, Dec. 1958, p. 121.

tive action may be taken in implementing these suggestions and gearing production to meet an expanding export market. So far, unfortunately, none of the foregoing has happened and if the Handicrafts of Andhra Pradesh have to enter export markets effectively, trade channels would have to be established with well-planned long-term measures.

Training scheme

A training programme was conducted by the All-India Handicrafts Board during the year 1953-54 for the purpose of training apprentices in making toys under the aegis of the society. According to the scheme the trainees were given a stipend of Rs. 25 per month per head for one year during the period of training. The skilled craftsmen had to take responsibility for training the apprentices in their charge for which a sum of Rs. 10 per month per apprentice trainee was paid to the craftsmen. Fourteen trainees received instruction in the scheme which commenced on 1.5.1955. But after a year it was found that the one-year training was insufficient: representations were made to the Board for the extension of the training scheme for another year. The Board approved the scheme and sanctioned a sum of Rs. 5,880 towards the cost of stipends and honorarium to Master Craftsmen. Out of the first batch of 14 trainees only 8 trainees joined the society. Even among those who joined, three were reported to have discontinued during the year. On the whole, the scheme does not seem to have achieved its objective. Another training scheme was started during the year 1958-59 under the control and guidance of the State Government. The Board sanctioned a grant of Rs. 10,000 to the State Government for the purpose, a dozen trainees received instruction and candidates other than "Arya Kshetriyas" (traditional toy-makers) were trained. Paid instructors have been employed for imparting training and the products of the trainees are marketed through the Central Sales Emporium, Vijayawada.⁶

The Arya-Kshetriyas have small families and hence children from these families in the appropriate age-groups were not avail-

6. All India Handicrafts Board—An Economic Assessment of Kondapally Toys, 1961, p. 4.

able for training. Trainees from other communities are new to the craft and cannot be expected to learn much, within one year, particularly in a medium in which they are uninitiated.

RECOMMENDATIONS

The prospects for the Industry are bright, as an investment of Rs. 100-150 may yield handsome returns, besides providing employment to craftsmen and a couple of part-time assistants. Raw-materials and overhead costs being relatively low, there is maximum return in the form of wages. Since all the raw-materials are available locally and there is a potential demand estimated at a lakh of rupees there is full scope for the expansion in production. In short, it is a typical India Handicraft, being labour intensive, requiring limited outlay on capital, and equipment, and providing employment to craftsmen and members of his family. It also affords opportunities for working in the home which is a great boon to artisan families, who also have a distinct role to play in the process of production. Each member of the family has a contribution in the making of the final products and since no wages have to be paid to family members, the costs are kept at a minimum and the returns are maximised. Another advantage is that children in the artisan families grow in an atmosphere heavy with crafts traditions and pick up rudiments and technique without effort. As an artisan boy grows into a young man, he is also full-fledged craftsman. Under these circumstances, it is possible for Handicrafts to grow provided they receive imaginative leadership and long-term plan assistance in techniques of production and marketing. It is suggested that trainees should be bound over to serve as active members of the co-operative for a period of 5 years since considerable investment in their training is being made by Government. The training scheme should be continued and members should be provided adequate returns for their effort, so that they may not be easily led away to other callings. Some of the promising trainees may be introduced to principles of co-operation, management and business methods, so that they may be fully equipped to run the co-operative smoothly. Training facilities in techni-

ques of packing are of primary importance to Kondapally toys, which are fragile. The All India Handicrafts Board's Training Centre for packing at Mysore may be utilised for training some apprentices in the techniques of packing the toys. The Board's centre may be requested to conduct research on packing materials, particularly for packing Kondapally toys. This material should be light, strong, protective and attractively cartoned to serve for presentations.

The society is in dire need of financial assistance towards working capital and a further sum of Rs. 10,000 may be made available for this purpose. The introduction of small wood working machinery for cutting wood, making planks, cutting designs may help in reducing the time and cost element.

A plant for seasoning punki wood may also be started along with research on colours which should be traditionally Indian. In fact a research centre for vegetable and mineral colours would be useful in producing typical Indian colour schemes for all the Handicrafts in this State. The Research and Design Centre at Hyderabad or the Central Handicrafts Development Centre at Bangalore may undertake research on these lines and work out effective colour compositions which may guide craftsmen in choosing attractive colour schemes.

The Co-operative Society and the Industries Department may negotiate with the Forest Department for the supply of punki wood at economic rates. Facilities for storage and distribution of wood to members at reasonable prices will also go a long way in encouraging members to continue in the Industry.

Marketing and export promotion systems have to be stimulated with a great deal of imagination and forethought. Though the society may not face a serious marketing problem now, Handicrafts in the State will definitely come across bottlenecks in marketing with expansion schemes being implemented. It is for this reason that long range steps including the State Government's own emporia in leading cities and well planned publicity and sales promotion drives are essential. Standardisation in sizes, designs, colour schemes and finish have to be inculcated and enforced among the members of the society.

TABLE 8

Consolidated Statement of Pro forma Accounts and Balance Sheet of Kondapally Toys Co-operative Society

Sl. No.	Particulars	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58	1958-59	1959-60	1960-61	1961-62	1962-63
1.	Wages	—	—	—	—	—	—	—	—	—	—	—	—	—
2.	Raw materials	—	—	—	—	—	—	—	—	—	—	—	—	—
3.	Contingencies	124.21	278.09	22.50	768.76	183.88	1180.88	594.86	—	1278.30	946.33	1791.62	1980.96	383.08
4.	Salaries	190.08	36.96	301.50	661.56	—	1809.37	1089.31	1116.81	1326.66	1646.00	1509.00	1505.00	1493.00
5.	Depreciation	—	—	—	—	—	—	—	—	66.00	203.28	324.25	466.55	606.85
6.	Interest on Govt. capital	—	—	—	—	—	—	—	—	—	—	—	—	—
7.	Audit fee	—	—	—	—	—	—	—	—	—	—	—	—	—
8.	Supervision charges (if any)	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTAL		314.28	315.05	324.00	1430.32	183.88	2990.25	1684.17	1116.81	2670.96	2795.61	3624.87	3852.51	2482.93
1.	Production (Purchases)	1964.19	670.07	3629.25	12206.00	12335.44	13411.19	14002.69	14770.07	21103.00	28503.12	25429.19	18858.02	20762.87
2.	Sales	2507.50	902.10	3686.56	11821.25	14662.69	15735.56	15910.94	17728.71	25021.98	30904.64	27672.38	19448.47	24112.16
3.	Profit or loss	-1682.00	-1907.00	-2387.56	-2917.44	-2797.50	-2495.75	-1877.50	-437.66	+1648.41	+101.55	-359.91	-1014.17	+167.91

While a quality marking scheme may be extended to Kondapally toys, the design centre may work out standard patterns of size and colour schemes for the guidance of the society.

The table on p. 116 reflects the pro forma accounts and balance sheet of the Kondapally toys co-operative society. The society purchases finished stocks of toys from its members and hence the wages and raw-material columns are not filled in.

The production (purchases from members) of the society has risen impressively from Rs. 1,964 in 1950-51 to Rs. 28,503 in 1959-60. There was a downward movement of the figure in 1960-61 when the production (purchases) amounted to Rs. 25,429 and further reduced to Rs. 18,858 in 1961-62. There was a slight improvement in 1962-63 when the figure stood at Rs. 20,763.

The sales have shown a mixed trend, though by and large there has been noted progress. Sales moved from Rs. 2,507 in 1950-51 to Rs. 30,905 in 1959-60. The sales moved downward in the following years reflecting Rs. 19,448. In 1962-63 the sales improved to Rs. 24,112. The profit and loss position reflects that the Society has been suffering losses generally.

Profit was made during 3 years, i.e., 1958-59, 1959-60 and in 1962-63 and ranged Rs. 102 to Rs. 1,648.

The overall position of the Society is none-too-cheerful and it would be necessary to review the economics of the industry critically to put it on a sound footing. The salaries and contingencies need to be slashed and the prices paid to members worked out as a first step.

Economic Growth Analysis

Sectoral Analysis Theory

Every underdeveloped country tries to evolve a pattern of growth that merges with its historical experience, its population pressure and available technology. India's history of economic development has evolved round its agricultural sector and cottage industry, including handicrafts as a sub-sector. The objective has through the turn of the century been to provide enough agricultural surplus to feed the industrialised urban sector from which a feed-back came in the form of consumer goods. Generally a sequence of strategic choices is open to societies and decisions about allocation of resources are made in terms beyond the usual market processes.

The classical theory of production is formulated under static assumptions in the variable relevant to the processes of economic development. This was merged with the Keynesian Analysis which brought in dynamic variables like population, technology and entrepreneurship. However, in addition to these variables used for theoretic equilibrium of an economy it is possible to focus on the detailed composition of an investment in particular sectors of the economy.¹ Within a frame-work given by the desired total level of output, sectoral optimum positions are determined, on the side of the demand by income, population and consumer taste, on the side of the supply by technology and entrepreneurship.² At a given point in time the rates of growth in

1. W.W. Rostow, *The Process of Economic Growth* (Oxford 1953), Chapter IV.

2. W.W. Rostow, *The Take Off into Self sustained Growth* *Economic Journal*, March, 1951.

the sector vary greatly but it is possible to indicate leading sectors by the essential direct or indirect impact it has on the overall speed of development of the economy. According to the Rostowian analysis the changing importance of such leading sectors determines the stages of growth. For a leading sector to be identified an assessment is called for of the net contribution of the sector to the overall economy multiplied by its percentage rate of growth and its forward and backward linkages. In addition to this a leading sector is substantially influenced by elasticities of demand with respect to prices and income. Judged by the criteria of this analysis the handicrafts sector does not become a leading sector as it does not directly propel the economy forward. However the handicraft sector substantially influences the net contribution of the agricultural sector, judged by the Cobb-Douglas production function fitted to the given data* (see Appendix to this Chapter). It is quite clear that the marginal efficiency of capital and labour from 1958 to 1964 have been greater than one. (1.4 in the case of capital and 1.2 in the case of labour). This explodes the theory that the marginal productivity of employed labour in the rural areas is zero and confirms that the handicrafts sector has operated under increasing returns to scales. Its growth cannot be denied. What perhaps tends to be overlooked in an analysis such as this is that the sector is not self-sustaining but has to be subsidised. The reason for this peculiar set of circumstances with a rising profit ratio is that persons engaged in the sector have a high marginal propensity to consume and a high marginal propensity to import. (In this case imports come from the urban industrial sector). The profit accruing to cottage workers gets quickly used in semi-luxuries or is appropriated by the creditor. Hence the net reproduction rate of the sector baffles calculation. Yet from a regional point of view this sector absorbs the disguisedly unem-

*The Cobb-Douglas Function is used because it has a merit of making explicit a number of variables which are lost in the Harrod-Domas Formula. Firstly, the productivity of the labourer is a significant variable for the handicrafts sector. Secondly, it can be applied under constant, increasing or decreasing returns. Thirdly, the quality and the quantity of the labour and capital are examined. *Development*, Princeton, 1954.

ployed labourer in the region of the agricultural occupation. To that extent it smoothenes out seasonal fluctuations in the demand for labour in rural regions and prevents them from being as backward as they might have been without the boost to handicrafts sector. As a pre-condition to the take-off its contribution ex post will be more important than its contribution ex ante.

Dualism

While dualism in under-developed economies centres upon its socio-cultural aspects its purely economic features influence the pattern of development. Under-employment is generally attributed to the density of the population in the rural areas of growing economies. This increase in the labour force brings to the fore the problem of providing adequate employment opportunities for the under-employed workers. The alternative would be that growth falls into "the population trap", and can emerge from it only by a "critical minimum effort."³ The backward indigenous rural sector of the economy will serve as a drag on the modern industrial sector because it is characterised by backward sloping curves of labour supply and risk-taking.⁴ The only way of overcoming these backward sloping supply curves of labour and risk-taking is to introduce a sector which not only gives a production function with increasing returns to scales but also satisfies the high $\frac{C}{Y}$ of the persons employed in the sector. Since resources in the sector are not as mobile as in the industrial sector the marginal productivity theory cannot always be used for the allocation of resources. Yet the technical co-efficient of production are not fixed under labour-intensive industry. As such it is difficult to establish the zero marginal productivity of labour. Further, rural people have limitless demands for consumer goods—to turn these wants into a well-spring of economic growth, people must be shown the connection between the satisfaction of their wants and their will-

3. Harvey Leibenstein, *A Theory of Economic Demographic Development*, Princeton, 1954.

4. J. H. Bocke, *Economics and Economic Policy of Dual Societies*, New York, 1953 (pp. 3-5).

ingness to work and take risks.⁵ This has historically and traditionally been the task of the cottage industry and handicraft sector.

Allocation of Resources

In an underdeveloped economy allocation of resources is the kingpin round which growth evolves. For any long-term plan of growth, having decided upon the objectives, the allocation of resources depends upon the choice of the strategies to be adopted for achieving the objectives. From the onset of the planning process in India, while the heavy industries strategy has occupied the highest position in resource allocation, agriculture together with its sub-sector of handicrafts has been a close second. The objective of the growth has been worked by adopting the strategy of 'unbalanced development,' in order to make an optimal strategy which ultimately leads to the golden age.⁷ The effects of a choice of a strategy upon the long-term growth of an economy is an important factor in evaluating the pattern of investment, and in determining the choice of a new or different strategy *ex ante*.

In an underdeveloped economy with a large population, with low per capita income, we can have two important strategies which will accelerate the growth process. Firstly, the heavy industry, machine good manufacturing sector will have to be built up requiring heavy investment and a large import content in the initial stages. In this process the output-capital ratio will necessarily be low, as these techniques of production are capital-consuming. Only when the sector reaches the self-reproductive stage will it be possible for output to grow rapidly. Secondly, there will be the non-mechanised consumer goods sector. Here again the choice of the techniques, in this non-mechanised sector, will depend upon the production function. The surplus

5. Benjamin Higgins, *The Dualistic Theory of Under-developed Areas, Economic Development and Cultural Change*, January 1956, pp. 111-112.

6. Albert O. Hirschman, *The Strategy of Economic Development*, p. 10.

7. Mrs. Joan Robinson, *The Accumulation of Capital*, p. 99.

maximizing technique will be the one which maximizes the output-capital ratio.⁸ Such a demechanised sector would help to channel its surplus consumer goods to the heavy investment sector. For this purpose it is essential to build up the handicrafts sector as a determinant of growth as rapidly as possible. It is the only sector where the demechanised, non-import content technique can be used. Even if the surplus is not maximized, the sector can be made to deliver the goods under a subsidy. There being large non-employment in the rural and urban areas, due to population pressure the real wage per man remains at near subsistence level till full employment can be reached. Only at this stage can mechanised techniques be adopted in the handicrafts sector and wages can rise. In any case the real wage will not fall below the inflation barrier.⁹ Due to the collective bargaining of workers even in the handicrafts sector, a constant money wage will prevent prices from rising and growth in this sector will be non-inflationary. Thus the rational of growth in the handicrafts sector is that the wage goods required by the heavy investment section is being supplied with the use of non-mechanised equipment.¹⁰ The entire production capacity of the heavy investment sector is used only for its own re-production, thereby minimizing losses or wastage of scarce resources and ultimately effecting the maximum saving in foreign exchange. On the other hand the handicrafts sector besides affording employment and wage goods helps to raise the marginal productivity in the rural areas. Besides this sector has a high rate of growth at a low subsistence wage.

With a given wage rate $\tan X \ominus$ can be derived a production function on which technique X_0 is most profitable having the highest surplus although it is not a highly mechanised technique.¹¹ If future prosperity is to be ensured at the cost of present gratification, X_0 will be the most acceptable technique. But if the claims of the present are stronger S will be a most profitable

8. A.K. Sen, *Choice of Techniques*, 1960, Chapter I.
9. Joan Robinson, *Accumulation of Capital*.
10. Gautam Mathur, *Planning for Steady Growth*, 1965.
11. A.K. Sen, *Choice of Technique*, p. 28.

technique. This will have to be a policy decision which planners must make in the choice of the technique. In fact the surplus from the X_0 can be diverted to the heavy investment sector giving a balanced growth sub-dash economy for production of wage goods. Being a labour-intensive process, the handicrafts sector also needs to be a subsidised one for its own consumption goods requirements. In such a linked system the long-term rate of growth of economy will be the highest that can be achieved. The growth of the heavy investment sector can go on until the full employment level requirements of heavy machinery is reached. After this stage the growth of the heavy sector can be decelerated and diverted to the production of light machinery which in turn can be used for the production of consumer goods. Till such a stage is reached the growth of a non-mechanised handicrafts sector is essential to impart a balanced growth strategy; failing which inflation will creep in as is evidenced by the unbalanced strategy projected by Mahalanobis for the Second and Third Plans. Such a balanced growth strategy in which allocation of resources uses the degree of mechanisation of techniques excludes two myths generally associated with under-developed economies. Firstly, it has been argued that the late comers in economic developments have always had the advantage of drawing upon the stick of technical no harm from the advanced countries.¹² Secondly, it has been insisted upon that unless the latest techniques are rapidly applied, economies will continue to grow slowly.¹³

Appendix on Production Function: Substantiates the fact that the handicrafts studied in this work yield a fairly high exponential and linear rates of growth. Given the capital elasticity of output B , the growth of productivity over time of the employed population depends upon the rates of change of capital per head which in this case is limited. If we assume that the rate of innovation is negligible then profit maximization occurs where marginal productivity of labour and capital is equal

12. Gottfried Haberler, *International Trade and Economic Development*, p. 11, National Bank of Egypt, 1959.

13. Galenon and Leibenstein, *Investment Criteria*, CJE.

to real wages. Obviously when confronted with a choice the labour intensive technique is to be preferred even though the marginal productivity of labour is slightly lower than the marginal productivity of capital (2.817 as against 2.907). This will hold true as long as labour intensive methods do not affect the growth rate. In Harrod Donmar Model the labour intensive growth path would absorb more labour in successive period than capital intensive growth path. If capital K produces output X and if the savings rate over the same time period is S then in the handicrafts sector total savings will be equal to X. Thus if the handicrafts sector does not adversely affect the savings rate of the economy than the growth of output g will be higher. The exact growth rate will depend upon the extent to which (m.p. of labour) can be varied as an instrument variable. Given a constant level of technology and unlimited supply of labour, the rate of growth of output will depend on the m.p. of employed labour which in the long run depends upon the rate of growth of savings.

The Savings Effects

It therefore remains to prove that labour intensive handicrafts *do not* adversely affect the saving rate. In order to prove this a definition of the institutional and economic setting in which investments take place is called for. Low per capita income and low per capita saving continue to plague the economy despite fifteen years of planning. Already the dualism in the economy has been elaborated upon to show that currently there is a significant volume of disguised unemployment in the traditional rural sector. This has the double effects of bringing about an exodus of young workers to the urban areas and at the same time creating an unlimiting supply of labour at the prescribed wage-level in cities. In turn this causes a disparity in the wage-level of the urban and rural areas. Now if the economy is faced with the choice of techniques, it would to all intents and purposes select the heavy investment industries in the urban and the semi-urban areas where technically skilled labour and heavy overhead infrastructure are available. The relative prices of labour and capital in the urban location would be such as labour inten-

sive investment would be less profitable. Hence the need for a strategy of steady growth that would link up highly mechanised techniques of the heavy sector in urban areas with the low degree of mechanisation of cottage industries in the rural areas.

If we assume that the wage differential between the handicrafts sector and the mechanised sector is fairly large then this differential in most cases will be compensated by the increase in number of workers in the former. The total wage ratio to output will then remain the same for both sectors. As long as there is unlimited supply of labour, workers both in the rural and urban areas will be near subsistence level in their respective sectors. Both the wage—goods—demand of the urban worker keeps increasing so rapidly on account of the “Demonstration Effects”,¹⁴ that all his earnings quickly get spent while this creates the necessary effective demand for wage—goods at the same time it leads to “Dis-saving” in the group of workers in mechanised production. The total savings of urban workers in India have been revealed to be very low and a small fraction of total output.¹⁵ As such the anticipated adverse effect of savings in labour intensive technology is certainly not greater than its counterpart in the highly mechanised sector. Further, in the rural areas there is the consumption of the disguisedly unemployed labourer and or unproductive labour, a transfer of these on the Nurksian basis may add to this hidden rural saving.

Empirical evidence of the handicrafts under study has proved that the assumptions made in this chapter are valid. The validity of the hypothesis that investments in the labour intensive rural industry and handicrafts in under-developed economies would lead to higher output in the short run and a faster rate of growth over time than similar investments in a highly mechanised light industry sector is based on the following assumptions:

(a) The total output with a given quantum of invest-

14. R. Nurkse, *Problems of Capital Formations of Under-developed Countries*, Blackwell, 1953, pp. 63-67.

15. Lakdawala and Others, *Works, Wages and Well-being of Bombay City*, p. 303, Bombay University

ment of capital is positive in a handicrafts sector (See Appendix for marginal efficiency of capital);

- (b) The rate of saving or surplus is higher in the case because the O/K ratio is higher and the subsistence rate being constant in non-mechanised techniques, the plough back can also be higher than for similar investment with a mechanised technique.

This saving or surplus effects in handicrafts can be further substantiated from the fact that capital is scarce in under-developed countries, that it has to be channelled more in the heavy industry sector and leave the labour intensive handicrafts sector to enjoy the advantages of a sheltered market. Such a sheltered market allows the latter to derive a high rate of profit without having to innovate new product or processes. As the national income increases this sector produces a variety of consumer goods with labour intensive methods which in turn generates effective demand and steps up the growth rate. This growth effect is justified on the following grounds:

- (1) Generation of employment;
- (2) Decentralisation based on dispersal to rural area; and
- (3) Activization of latent reserves of scarce resources of entrepreneurship.¹⁶

From the Appendix on growth function it is clear that the handicrafts studied have yielded approximately a growth rate of 37.7 per cent annually for the years 1958-59 to 1963-64. While the degree of mechanisation cannot be quantitatively measured in the handicrafts study, the possible techniques can be ranged in order of output they yield. A higher output per head could be ranked as a higher degree of mechanisation.¹⁷ It has been seen that the O/K ratio is higher in more labour intensive industries. But the output per man may be lower. The optimum technique used for each industry determines its surplus and rate of growth.

16. Government of India, Second Five Year Plan, 1956, p. 47.

17. Mrs. Joan Robinson, *Exercises in Economic Analysis*, p. 4.

While employment is one of the considerations for using non-mechanised techniques in handicrafts it is not the sole objective. Output is a far more important determinant of growth, since India has to face scarcity of capital and raw-material. If employment were an end in itself, we could as Lord Keynes suggested provide an occupation of "digging holes and filling up again." It is only in the context of primarily building up the heavy industry sector, that handicrafts contribute to growth by providing their requirements of wage goods with minimum absorption of capital goods and negligible reliance on foreign exchange. Thus the handicrafts sector would also leave the heavy industrial sector free to reproduce itself instead of diverting its product to luxury consumer goods. If, on the other hand, the handicrafts sector were to adopt mechanised techniques then the aim of investment in capital goods production would become self-defeating.

The evidence presented in this analysis both from the point of view of marginal productivity and the production function and from that of the growth function indicates the need to boost the handicrafts sector as a concomitant of the growth of the capital goods sector. This may involve a re-examination of Government policy towards handicrafts with a view to vitalize and subsidise them until target date when the capital goods sector would become fully self-reproductive. Only after that stage is reached the output of the sector can be used to mechanise the production of wage goods.

PRODUCTION FUNCTION THEORY

Cob-Douglas production function is:

$$x = a n^l k^r u, \quad \text{where}$$

x = output,

n = labour input,

k = capital input,

u = random disturbance,

l = elasticity with respect to labour input.

r = elasticity with respect of capital inputs.

Define l as:

$$l = \frac{\text{Percentage change in output}}{\text{Percentage change in labour input}}$$

and r is defined as:

$$r = \frac{\text{Percentage change in output}}{\text{Percentage change in capital input}}$$

The function is in exponential form and hence it can be solved only after rendering it in linear form. This is done by taking logs. Then we have,

$$\log x = \log a + l \log n + r \log k + \log u$$

Further properties of this function are

- (i) Marginal productivity of labour $= l \times \frac{\text{output}}{\text{input of labour}}$
- (ii) Marginal productivity of capital $= r \times \frac{\text{output}}{\text{capital input}}$
- (iii) Since profit maximisation occurs when marginal productivity is equal to real wage we have the maximisation equations as:

$$\frac{\partial x}{\partial n} = \frac{w}{p} \quad \text{and} \quad \frac{\partial x}{\partial k} = \frac{q}{p}$$

Where,

p = price of output

w = wage rate

q = price of capital inputs.

WORKING

From the data given in the thesis we get the value of l and r as follows:

$$l = 1.2558$$

$$r = 1.1427.$$

Therefore, our production function would be

$$\log x = 1.2558 \log n + 1.1427 \log k + \log a$$

Where the values of $\log a$ for the 6 years in order is given as follows:—

Years	log a	
1958-59	-6.280	
1959-60	-6.288	
1960-61	-6.288	
1961-62	-6.666	
1962-63	-6.292	
1963-64	-7.725	Results

(i) Now $l=1.2558$

\therefore elasticity of labour inputs is >1 which means there is a greater possibility of increasing the labour input.

(ii) $r=1.1427$.

Hence the elasticity of capital input is >1 which means there is a greater possibility of improving capital input as well.

Also it is seen that the values of l and r are nearly equal which means the elasticity of both capital and labour inputs are nearly equal and both are >1 and elastic.

(iii) Marginal productivity of labour is given by the formula $l \times$ average productivity of labour. The marginal productivity is 2.817.

(iv) Marginal productivity of capital is given by the formula $r \times$ average productivity of capital. The marginal productivity of capital is therefore 2.907. It is seen therefore that the M.P. of both labour and capital is quite favourable for expanding the industry.

(v) Profit maximisation condition is equal to real wage.

The conditions are $l - \frac{x}{n} = \frac{w}{p}$ and $r - \frac{x}{k} = \frac{q}{p}$.

We see that $\frac{w}{p} = 0.4042$ and $\frac{q}{p} = 0.3927$ whereas $l - \frac{x}{n} = 2.817$

and $r - \frac{x}{k} = 2.907$.

Hence it is seen that the M.P. of both labour and capital is too high compared to the respective real wages. Therefore there is a possibility of increasing the production.

Growth Curve or Growth Function

(Reference: Econometric Methods by J. Johnston—Chapter 2)

Data

<i>Years</i>	<i>Production</i>
1958-59	184286
1959-60	219191
1960-61	209156
1961-62	282934
1962-63	257263
1963-64	232940

Theory

Suppose a variable Z grows at approximately a constant rate of B per cent per unit of time t then rate of growth is given by the equation.

$$Z_t = AB^t V_t,$$

where Z_t = value of Z at a given period of time,

A = constant,

$B = (1 + g')$ where $g = 100g'$ per cent rate of growth

V = random disturbance at period t

The above equation is same as,

$$\log Z_t = \log A + (\log B)t + \log V_t$$

putting, Y_t for $\log Z_t$, α for $\log A$, β for $\log B$, U_t for $\log V_t$, we get the equation in the form,

$$Y_t = \alpha + \beta t + U_t$$

In the above equation the coeffs, α and β can be estimated by using the method of least squares.

Computation of Exponential Growth rate :

<i>Years</i>	<i>Time</i> x_t	<i>Production</i> z_t	<i>Log z_t (y_t)</i>
1958-59	1	184286	5.2653
1959-60	2	219191	5.3406
1960-61	3	209156	5.3203
1961-62	4	282934	5.4516
1962-63	5	257263	5.4102
1963-64	6	232940	5.3672
Sum (Σ) : 21		—	32.1552

From the above table we have

$$n=6; \Sigma X=21; \Sigma Y=32.1552$$

$$\Sigma xy=0.4248 \text{ and } \Sigma x^2=17.5$$

[where $x=x-\bar{x}$, $y=y-\bar{y}$ Σxy and Σx^2 are respectively the sum of the Cross products of deviations from the means x and y and sum of the squares of deviations from the mean of x .]

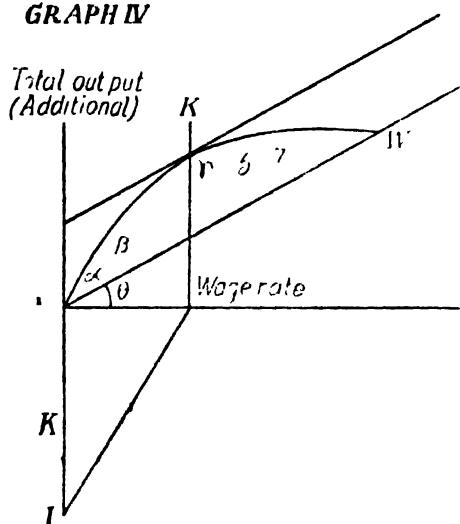
$$\text{Growth coefficient } \beta = \frac{\Sigma xy}{\Sigma x^2} = \frac{0.4248}{17.5} = 0.02428$$

The fitted equation is $\log Y_t = 5.2653 + 0.02428X_t$

The resultant exponential growth rate is 5.75 per cent per annum assuming a constant compound rate of growth.

The linear rate of growth has been estimated at 6.68 per cent per annum. '

GRAPH IV



CHAPTER XI

Retrospect and Prospect

(Conclusions and Recommendations)

The foregoing analysis suggests a compelling case for the development of Handicrafts as an important factor in the national economy. Limited capital investment, labour-intensity, dispersal of units, extensive use of indigenous inputs, and export potential indicate their suitability in a developing economy.

Growth of handicrafts in Andhra Pradesh during the First and Second Plan and till the Mid-Third Plan period was as follows:

1. *The investment* in the State Sector rose from Rs. 63,984 in the First Plan to Rs. 15,06,703 in the Second Plan—an impressive improvement of over 1800 per cent.

2. *The employment* generated as a result of the foregoing investment rose from 166 in the First Plan to 831 in the Second and went on to 2219 by the end of Mid-Third Plan period (in the Co-operative and Government Sectors) registering an increase of nearly 500 per cent from the First to the Second Plan and nearly 300 per cent from Second to Mid-Third Plan period.

3. *The production* of Handicrafts in the Co-operative and State sectors rose from Rs. 4.32 lakhs in the First Plan to Rs. 25 lakhs in the Second Plan reflecting an increase of over 600 per cent.

4. *The sales* through Government Emporia rose from Rs. 11.42 lakhs in the First Plan to Rs. 39 lakhs in the Second Plan showing an increase of over 300 per cent.

Other factors reflecting the self-sustaining growth of the sector are: an increase of 1500 per cent in the number of persons

trained, 600 per cent increase in the number of crafts started, 300 per cent increase in the number of Sales Emporia, over 600 per cent increase in the number of schemes implemented, over 500 per cent increase in the amount of loans sanctioned, and over 700 per cent increase in the number of new co-operative societies, as between the First and Second Plan periods. There has been a further, though less spectacular, improvement up to the Mid-Third Plan period.

The foregoing results have been obtained largely within the framework of existing administrative and supervisory machinery. Even better and quality-oriented results will be possible with adequate field and supervisory staff of the right-type.

Handicrafts can effectively participate in a programme of full employment with their small-size and labour-intensive characteristics. They are likely to be of low-capital-intensity requiring inexpensive and limited training, less-dependent on imports of raw-material and less liable to fluctuations. They will besides be of the quick investment type and by carrying the jobs to the workers can overcome the difficulties of territorial immobility.

The development of Handicrafts can be linked with a programme of town-centring in locating new enterprises and thus replace the Industrial Conurbation in Metropolitan centres. Agro-Industries could thus form the basis of growth of small-sized towns, and the Handicrafts Sector would provide spare time employment to the peasant and his family, thus supplementing their income. This is particularly relevant in the context of seasonal unemployment in the Agricultural sector.

And finally one cannot deny that there will remain a large scope for small industry even after a maximum scheme for large scale industries has been executed. (As has been borne out by actual conditions in many European countries and quoted later.).

RECOMMENDATIONS

The main objectives for the development of Handicrafts should be:

1. To strengthen and support the skilled artisans and ensure them suitable and regular employment;

2. To preserve the essential traditional skill and craftsmanship and to improve the quality and designs of Handicrafts.
3. To provide employment opportunities.
4. To ensure that Handicrafts contribute increasingly to National production.
5. To give a new orientation to Handicrafts production so as to combine art and utility; and
6. To develop Handicrafts both for export and domestic consumption.*

Organisation of Co-operatives

An analysis of the study made in this thesis has revealed that several structural forms and basic approaches need to be reviewed and recast in a realistic way. The organisation and functions of Handicrafts co-operatives leave much to be desired and very often there are mushroom co-operatives, which are functioning merely to exploit facilities provided by the Central and State Governments.

Before a Handicraft Co-operative is registered and aided it must be ascertained that the bona fides of the promoters are established beyond doubt and their sincerity of purpose is unassailable. It would be helpful if co-operatives are formed by practising craftsmen themselves, who have a stake in the Handicrafts and desire to make an honest livelihood availing a fair use of Governmental and institutional facilities.

While these criteria may be followed in regard to the new societies that may be registered in the co-operative sector, it is essential that those functioning already must be reviewed commercially and critically. Such units which are not economically viable must be analysed and if legitimate aid is possible, it should be afforded. But such of those co-operatives which are chronic cases, and these are not few by any means, should be dissolved

* Report of the Working Group in Evaluation and Progress of Handicrafts Industries during the Second Five Year Plan, p. 50.

and genuine craftsmen in their fold asked to reform a co-operative.

Thus it will be possible to separate the chaff from the grain, the exploiter from the artisan and the middleman from the cycle of Handicraft production and distribution.

This would be a sure way of ensuring that the price paid for Handicrafts by consumers will, in some reasonable measure, reach the artisan whose economic status is by no means promising.

Since some co-operatives are formed for ulterior motives it would be worthwhile to consider affording similar facilities as are available to co-operatives, to entrepreneurs. This would stimulate entrepreneurs to enter the Handicrafts field without the fear of cumbersome organisational patterns and restrictions. This will also eliminate the undesirable promoter who may do more harm than good to the sector.

The Union Minister for Community Development and Co-operation had announced the setting up of a committee to probe spurious co-operative societies. The probe will investigate vested interests in the co-operative movement and recommend measures to make the movement self-reliant.

The Industrial Co-operatives are recipients of the following types of financial assistance in Andhra Pradesh:

- (1) Loans—State Govt. under Plan Programme,
- (2) Grants—For equipment,
- (3) Common Facility Centres,
- (4) Managerial Assistance: The Central Government reimburses amounts to the State as per the following schedule:
 - (a) 1st year . . 100 per cent
 - (b) 2nd year . . . 75 per cent
 - (c) 3rd year . . . 50 per cent
 - (d) 4th year . . . 25 per cent

A scheme has been formulated for equipment under which the party meets 50 per cent of the cost and the Centre and State 25 per cent each.

A plea is made for similar facilities to private entrepreneurs as craftsmen.

Raw-materials

The procurement, processing and storage of raw-materials required for Handicrafts is a problem which needs to be analysed thoroughly and concrete measures evolved to ensure supply of quality raw-material, at reasonable rates, to artisans. Such raw-material, as wood, which is dealt with by Government in the Forest Department must be made available at cost price so that the craftsmen may take advantage of the facility. Wood seasoning plants, storage depots and cheap transportation will help artisans to take advantage of these facilities and produce qualitative products at reasonable price.

It is well-known that most Handicrafts depend on locally available raw-material, which is a factor in their favour. But even though they are located close to sources of raw-materials, the raw-material is not always available to them at the most advantageous price or in the required condition. This point has been brought home in the study of Kondapally toys, and Bidriware.

While facilities must be made available for the procurement at reasonable prices an inspecting staff is essential to see that the raw-material allotted to a co-operative is not misused, or sold away in the market. Sometimes valuable and scarce material like ivory, zinc and copper, gold and precious stones are used in the making of Handicrafts and any facilities afforded must be solely for bona fide craftsmen.

It would be useful, if a survey is conducted in regard to consumption of scarce raw-material in various Handicrafts and an annual indent prepared to ensure timely procurement, storage and distribution of raw-material.

This is particularly important in regard to Handicrafts which are using imported raw-materials, wherein the time lag in supplies has seriously obstructed production schedules. Since the declaration of the National Emergency, imported raw-materials have been extremely difficult to procure and oftentimes, the rates quoted in the market are exorbitant. This has a tendency to

upset estimates and it is not possible to revise selling prices of articles with the frequency of changes in the costs of raw-material. The All India Handicrafts Board should assess the requirements of imported and controlled raw-materials from various State Governments. The Government should issue import licences and allot quotas for these raw-materials to the Board for further distribution. State Governments should set up suitable organisations for regional distribution of raw-material as adjuncts to the Emporia. This would enable the Emporia to see how much of the raw-material supplied is actually being used in crafts.

The practice of combining training with production units is not desirable. The accounts of the two functions should be kept separately and the production costs of articles worked out on commercial lines. Normally, production centres should be run by genuine co-operatives or voluntary agencies. However, with a view to maintaining quality and preventing shortages, the Government may step in for a short initial period.

Financial assistance

The pattern of financial assistance from the Centre for the development of Handicrafts should entail no discrimination in regard to the amount and terms of grants which are given to the co-operatives as compared with similar State-run developmental and commercial schemes. Those artisans who find the co-operative organisation inconvenient or cumbersome must be allowed to form their own manufacturing units with as many facilities available to them as are provided to co-operatives.

The Government may consider the possibility of giving initial capital to co-operatives or genuine practising craftsmen for a period of 10 to 15 years either in the form of interest-free deposits or indivisible reserve fund. The first charge on the profits will then be a clearance of the deposit or the indivisible reserve fund.

Following the pattern of financial assistance given by the State Bank of India to the Small-scale Industries similar assistance to Handicrafts should be carefully and sympathetically provided.

ed. Here the State Bank may come across similar barriers as those experienced by the Reserve Bank in their operation of Rural Credit Schemes. Since most artisans are illiterate and fight shy of circumbendibus procedure, efforts must be made to keep the fruition of loans to as simple and convenient a formality as the indigenous moneylender. It will also not be possible for artisans to provide weighty securities and a great deal has to be viewed in good faith.

The Government may consider the possibility of establishing a Handicrafts Credit Insurance Fund for guaranteeing loans to bona fide producers and dealers by recognised institutions.

Techniques of production

It has been accepted in principle that improved techniques of production will be instrumental in greater production and more prosperity to the craftsmen. While small machines and labour saving devices are essential, it must be ascertained that the artistic component in a Handicraft is essentially a hand-operation. To this end, it is necessary to create research institutions with top rate technicians, who will be able to devise simple tools and improved techniques to ensure greater production and better quality. Though a beginning in this direction has been made by the starting of the Central Handicrafts Development Centre at Bangalore, its activities need to be broad-based and expanded suitably to cover the many crafts in the country.

The equipment devised should be of reasonably low capital cost, should be capable of being employed in small individual and co-operative units to increase efficiency and reduce cost, without causing much labour displacement. Where introduction of expensive machinery is considered, this should be made available through Common Facility Centres. Small Power Driven machines should be introduced for preparatory, repetitive and simple processes.

Hire-purchase facilities of these machines, as are provided by the National Small Industries Corporation, should be provided to artisans so that they may be able to procure these machines without much financial inconvenience.

Training

It has been observed that trainees after completion of training usually drift to other more financially attractive avocations. Though 36.7 per cent of the total amount allocated during the three years of the Second Plan period was spent on training, this has not made a corresponding impact on the quality and number of craftsmen trained.

Only at a few centres a proper type of training is being imparted; otherwise the quality, the method and duration of training need much to be desired. In running these centres the State Governments are inherently handicapped by administrative rules, procedures and pressures. With a few exceptions, training has been provided to new recruits from non-artisan class, who have not been able to stand on their own feet after their training; the emphasis should be rather on finding work for the unemployed and under-employed skilled craftsmen than on training new recruits who may not have a stake in the craft.

The States should afford advance training to practising craftsmen and leave the preliminary training to the apprenticeship system, which should be suitably readapted to present needs.

Labour

A critical analysis of the desirability of extending the Factory Act and Employees State Insurance to Handicrafts must be undertaken. This study is suggestive of the fact that Handicrafts units should not be treated as factories as their conditions and atmosphere are entirely different. Moreover, the psychology of industrial labour of doing minimum work and expecting maximum returns is hardly conducive for Handicraftsmen whose should be a labour of love.

The Factories Act, under which Nirmal Industry has been functioning, and which has just been introduced in Bidri, has done more harm than good to the dedicated endeavour expected of craftsmen. The formation of Trade Unions has distracted them from their purpose and has created factions, unrest and stimulated discontentment.

Craft associations in Vedic India were as keen regarding high standards of performance as of asserting rights. It will be far more advantageous to revive these associations and afford necessary facilities to craftsmen. By trade unionism the expenses of facilities would be as high with the corresponding disadvantages of factions, unrest, go-slow and allied conditions known to Industrial Labour.

An incentive scheme with strict quality control would be most useful for Handicraftsmen.

Publicity and Marketing

The need for a planned and efficient publicity and sales promotion drive in regard to Handicrafts can hardly be over-emphasised. Indian Handicrafts have not merely to compete with the Handicrafts of other countries but have to compete with the superior publicity and sales promotion methods adopted by them. Though qualitatively our goods may be superior, they are not able to make the desired headway primarily due to an unbusiness-like handling of marketing problems. This is particularly so in regard to exports of Handicrafts, market analysis and sales promotional activities.

The role of market research is particularly significant in Handicrafts as the amount of standardisation is extremely limited. Moreover, it is possible for Handicrafts to be produced according to the individual requirements of any community and sections therein. It is, therefore, all the more necessary that market research must be conducted in considerable detail ascertaining the colour schemes, designs, shapes and the price range, from enlightened customers.

The impact of standardisation, which will be difficult to introduce beyond a certain point, will be unwholesome in the long run and may also adversely affect sales in foreign countries. The unique feature about Handicrafts is their "individuality and original character." No machine will be able to impart the stamp of artistic merit which can be produced by Handicraftsmen. Even within the country, standardisation of Handicrafts will not enable them to retain the same place of privilege as they would

then be comparable to mass produced goods and will have no special point in their favour.

Handicrafts should be classed as essential items of trade in bilateral and multi-lateral trade agreements.

Negotiations should be undertaken with foreign countries to reduce tariffs and duties in regard to Indian Handicrafts. There are countries which levy as much as 100 per cent or more tariffs on the import of Handicraft items.

Research must be conducted in regard to packaging problems of Handicrafts and ways and means devised to produce an attractive and strong package which could be acceptable and inexpensive. Packaging constitutes an important problem as various Handicrafts need to be packed in different media. Training courses for packers must be conducted extensively, as the package is almost as important as the product itself. Though a beginning has been made in this connection by the Package Training Centre, at Mysore, conducted under the aegis of the All India Handicrafts Board, it would be worthwhile to attach a research unit in packaging with each of the Regional Design Centres of the All-India Handicrafts Board and the Research and Design Centres of the State Governments. This way there would be a regional approach to the problem of packaging and special attention will be devoted to the specific problems of local crafts in regard to packing and packaging materials and technique.

Mobile Craft Exhibition units devoted to special subjects may tour cities with selected crafts. To stimulate popular enthusiasm in the rural sector it would be advisable to introduce mobile exhibitions comprising inexpensive items like pottery, cane and bambooware, beads and jewellery (made of brass or copper) in the smaller towns and villages.

The production of coloured films on the manufacturing process of exportable Handicrafts could be undertaken and exhibited at International Exhibitions and Trade Fairs and by our Trade and Diplomatic Missions in different cities of the world.

When International Exhibitions are held special attention should be paid to follow up action and the comments of trade interests and consumers must be passed on to manufacturing units so that the benefit of the advice could be availed of.

All State Governments should take early steps to implement vigorously the programme of inter-State marketing on reciprocal basis. Sales staff should be properly trained and motivated and the show-rooms and display should be improved.

Regular and detailed sales analysis should be made by the Emporia and market forecasts prepared to gear-up production accordingly to meet seasonal demands.

Overhead expenses of the Emporia continue to be as high as 25 to 50 per cent and should be critically reviewed by Management.

Emporia should be provided with revolving funds for their working capital.

A number of non-officials interested in Handicrafts should be associated with the management of Emporia so that the tastes of the customers are communicated to the Management for implementation.

The Railway and Civil Aviation authorities should be approached to consider urgently and favourably the reduction in freights on Handicrafts. The present telescopic railway freight rates should have more "legs of short distance" and Handicrafts should be made eligible for movement in small consignments by railways.

Incentives for sales staff should be provided in addition to their salaries. The incentives should accompany the pay packet every month to stimulate best results.

The Government has set up Boards to deal with Handloom, Silk, Coir, Handicrafts and Khadi and Village Industries. Each of these organisations is running Emporia in principal cities which has given rise to considerable duplication of marketing efforts and has resulted in excessive overheads and unnecessary sinking of capital. There is considerable scope for mutual co-operation and co-ordination between the various Boards/Commissions and the State Governments. Each of the All India Boards/Commissions should discuss and adopt such items of sale which can be sold at the same place without jeopardising each other's interests.

The State entry into marketing of Handicrafts should be regarded as a short-term activity. A phased programme should be drawn up to hand over the management of Emporia to co-operatives/registered institutions. Several such Emporia including Bengal Home Industries, Victoria Technical Institute and Central Cottage Industries Emporium are profitable organisations.

During the First and Second Plans, major attention was afforded to the development of Handicrafts which cater to the foreign markets, tourists and the upper income groups in the domestic market. In the Third Plan adequate sustenance was provided to the activities already undertaken. Adequate attention should be paid to Handicrafts which cater to the needs of our middle and lower middle class consumers as well as rural and tribal crafts.

Research and Survey

The Planning and Research Section of the All India Handicrafts Board has not been able to measure up to its tasks. The research output has been pitifully small. The section should be reorganised and its activities expanded.¹ The Research and Survey Section consists of a Deputy Director, an Assistant Director, a Statistical Officer and a Field Officer. I have learnt that though other posts exist in the Section the staff is drafted elsewhere. This is probably one reason why the output is so meagre.

The availability of statistical data is an important pre-condition to any developmental, marketing and export promotion activity. When I wrote to the Handicrafts and Handloom Exports Corporation of India, which is a subsidiary of the State Trading Corporation, I was replied vide their letter No. HHYC MKT/2(1)/63 dated 3 July 1964 that "Regarding the different countries to which these export figures pertain, the information may kindly be sought from the Director, All India Handicrafts Board, Willingdon Crescent, New Delhi."

Here is a situation where the quantum of exports is available with one organisation and the countries to which they are exported is said to be available with another. Such unnatural

1. *Ibid.*, p. 131.

distribution of essential data is ruinous to the export interests of Handicrafts.

It has been increasingly felt that Governmental handling of Handicrafts Institutions, particularly in the fields of marketing and export promotion, need to be more commercial and less bureaucratic.

It might be well worth the while to consider the appointment of businessmen and commercial executives at attractive terms to man commercial undertakings in the Handicrafts sector so that the proper type of approach to problems is possible. The procedures adopted to suit the needs of an audit by the Accountant General, is, to say the least, not conducive to satisfactory commercial functioning.

It must be appreciated immediately that there is a fundamental difference between the conduct of Government business and commercial transactions. If commercial functioning is attempted in the framework of rules and regulations, primarily evolved for bureaucratic purposes, the result can only be the creation of the same amount of red tape in commercial organisations as found in Government. The solution that suggests itself is that commercial undertakings must function under rules specially made for such a purpose and implemented by persons who have a background of commercial experience and are preferably top executives in leading firms.

They, of course, will not be available at the terms offered by Governments at present. It will be necessary to make emoluments attractive and a shade better than what is offered by the private sector to draw first rate managerial talent.

The extra cost on salaries will be more than adequately made up by the turnover of business and the final profits that would accrue.

Quality Control

Laboratories should be set up with adequate and competent staff at inspection depots which should also analyse the cost of production with a view to suggest economies. The Government should give preference to quality marked goods in the procure-

ment of stocks for Emporia and other Government Departments. Top priority should be afforded to schemes for quality marking particularly for exportable items. Specifications must be worked out on a priority basis for crafts which are not covered by Quality Marking Schemes.

Design Development

Design Centres should be craft-oriented. A Craft Centre with a minimum of 50 craftsmen must have a Design Centre set up under the supervision of a competent craft designer assisted by adequate and technically qualified staff.

An effective design extension service and proper liaison between market analysts, design centres, and the craftsmen should be evolved. The marketing agency may act as a clearing house for market research information.

To remove serious shortage of craft designers higher institutes for training of designers should be set up.

The system of recruitment of craft designers and their scales of pay should be suitably revised so as to attract really competent persons. This applies to other Research staff also.

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